THOMSON MULTI MEDIA

TV

Brandt FERGUSON NORDMENDE SABA TELEFUNKEN THOMSON

PARTS LIST
LISTE PIECES DETACHEES
ERSATZTEILLISTE
LISTA PARTI DI RICAMBIO
LISTA DE PIEZAS DE REPUESTO

THOMSON
29DU88M
Chassis ICC19

MODULES

MAIN	**ICC19B5E8064000**		
AMFM	**AM/FM19101**	**R**	**10349130**
CRT	**CRTBS19100**	**R**	**10354460**
DVT	**DVT19000**	**R**	**10350370**
FCB	**FCB1901**		**25262500**
KB	**KB4003**		**25251710**
MIS	**MIS19111**		**10537030**
RIR	**IR1900**		**25251770**
SCI	**SCI19003**		**10398010**
SFB	**SFB4002**		**10306070**
VM	**VM19100**	**R**	**10353940**

GR01	TMFT1330T	10132400
IA001	TDA7269	10348790
IA002	TDA7298	10348810
IB01,02,03	TEA5101B	10231440
IF001	TDA8177F	10352880
II050	TDA9811/V3	10336130
IL062	TL082/CP	46161100
IP050,**IX**001	MC7809/CT	70401402
IP060	TEA2261	90542470
IP130	MC7812/CT	46007600
IP140	TDA8139	10044580
IR001	ST90R92	10441970
IR002	SOFT M27C801-120F1 V1.00	10556720
IR003	M24C32BN1	10462210
IR004	MC14094BD	20334930
IS01,60	MC4558CD	10401230
IS10	MC78L08ACP	10308410
IS40	MSP3410D-PP	10510320
IT001	SDA5273S-C134	10443110
IT002	HYB514400BJ-80	10359750
IV001	STV2162 CUT2.2	10529490
IV001	STV2165	10360480
IV304	LM358D FLAT	10258670
IV308	DMUO-UP	10325580
IV309	TMS4C2972DT	10458130
IV601	TDA9143S1	10516090
IV602	TDA4665T FLAT	10155740
IX900	TEA6415C	15081290
ZL041	MP160	⚠ 10457130
ZV301	MP40	⚠ 10469170

TA001,**TI**030, **TP**150,166,190, **TV**063,073,083	BC857B SMD	30946660
TA002,**TI**031, 032,070,**TL**001, 062,063,**TP**027, 152,161,162, 167,170,175, **TR**002,102,105, **TX**955,960,965	BC847B SMD	11070770
TB18,**TV**108	BC327-40	16000450
TI010,033,034, 040,045,050, **TP**145,**TR**091, 095,106,**TT**004	BCR141 SMD	16006890
TI020	BF799 SMD	35031670
TL004	MPSW01A	70436520
TL005	MPS750	16001340
TL028,**TV**002	TIP122	10045750
TL30	ON4977(BU2525AX)	10461310
TM01,04,10,50, 51,65,66,80, 81,**TP**026, **TV**002,301,302, 321,322,601, 802,822,823, 842,843	BC846B SMD	16006260
TM02	BC337	16000520
TM05,**TP**08	BC548B	16000930
TM06	2SA1837	16001500
TM07	2SC4793	16001600
TM08	BC558B	16001110
TM09,**TT**001, 003,006,007, 011,012,**TX**830, 831,832,833	BC848C SMD	20438166
TM52,53,67,68, 82,83,**TV**001, 003,051,071, 300,600,801, 803,821,841	BC856B SMD	16006310
TP025	600V 1A25	10353960
TP060	BUL810TH	10224370
TP146	BD241C	16001880
TR048	BCR185 SMD	16006900
TT002,008,009, 010	BC858C SMD	50854683
TV303	BF660 SMD	16005830
TV304,308, **TX**620,622,650, 652	BC858B SMD	16006330
TV305,307	BF550 SMD	16005780
TV306	BF799 SMD	16005860
TX621,651	BC848B SMD	35030590
TX910,920,950	BC546B	45001866

DA001,**DB**26,28, 46,48,66,68, **DF**002,028, **DL**070,072,157, **DM**01,02,09,10, **DP**034,051,060, 061,151,152, 160,175,178, 179,190,**DR**090, **DV**025,026,027, 028,221,**RL**214, **RV**052	LL4148 SMD	16012450
DA002,**DV**011, 012	LL42 SMD	16012530
DB04,07	1N4004	44009009
DB31,32,51,52, 71,72,**DS**61,62	BAV203 SMD	10222420
DB50,70	BAV21	16007470
DF001,**DL**092, **DM**01,02,03,04, **DP**027,08, **DR**091,**DX**800	1N4148	44009209
DF007	ZMM15	16030060
DF011	BZW04-58	10368210
DF031,033, **DL**001,051,052, **DM**03,04,**DP**050	RGP10G	10459090
DH001	ZMM33	10376460
DI001,002,040, 041,051,070, 071	BA782S	20542050
DL030	DTV32F-1500	10452490
DL032	BYT08P-400A	16008650
DL034,036	BYT01-200	16008600
DL041,**DP**108, 109,130	RGP30D	10455370
DL043	RGP10M	10455320

R : RECYCLED PART
: PIECE RECYCLEE
: AUSTAUSCHTEILE
: RICAMBIO RICICLATO
: MODULO REPROCESADO

For any requests, please contact THOMSON multimedia after sales service area
Pour toutes précisions, contactez votre service apres vente local THOMSON multimedia
Für weitere Auskünfte, wenden Sie sich bitte an die THOMSON multimedia Kundendienste
Per precisazioni, contattare l'assistenza tecnica THOMSON multimedia
Para cualquier pregunta, por favor contactar con el responsable de zona del servicio postventa de THOMSON multimedia

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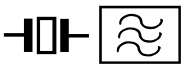
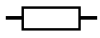
DL046,**DP**022	FUF4005	16009580
DL050	BZX85C22	11072690
DL060	ZMM3,3	16030170
DL066	ZMM47	10250480
DL071	BZX55C33	11073690
DP028,**DX**814	BZX55B5V1	50890550
DP040	BZX85B2V7	16020210
DP041	BAT42	16007410
DP052,133	1N4001	16008160
DP053	RGP15G	10272800
DP10,11,12,13	GP30M	10455410
DP110	RGP50M	10298160
DP112,113	MUR1100E	10360280
DP134	1N5817	16008270
DP140	BYV63-150	16009010
DR104	BZX55B9V1	70438220
DV001	ZMM2,7 SMD	16030100
DV101	ZMM6,8 SMD	70439940
DV104,108, **DX**120,151,220, 251,301,351	BAV103 SMD	10155030
DV301,305,309	BB729S SMD	20542090
DV303,304, **LV**320	BA582 SMD	16012130
DV623	BZX84C5V1 SMD	16030330
DX810	BZX55B8V2	40441820
GE01	TLUV5300 LED	11137650



FI010	OFWK3954M FOS	10357610
FI015	OFWG3970M FOS	10512420
FI020	OFWK9453M FOS	10176450
QI053	6M0HZ	48042300
QI070	6M5HZ	20356510
QR001	27M0HZ	10254120
QS40	18M432HZ	10334670
QT001	20M48HZ	10495020
QV601	4M433619HZ	10397980
QV602	3M579545HZ	10087720

FI001	40M4HZ	20300950
FI002	38M9HZ	10319260
FI030	77M8HZ	10348570
FI040	6M6HZ	10437980
FM50,65,80	100NS	10203890
LL034		10153270
LV312,315	7M96HZ	10519360
LV318	7M96HZ	10519350
LV331	7M96HZ	10519340

PI030,035	2K2 OHM	10308240
PI050	22K0 OHM	10272680



JP310	1K0 OHM 1% 0,25W		15012570
RA013,014,030	4R7 OHM 5% 0,35W	⚠	10226310
RB01,04,79	1K5 OHM 5% 0,50W		10121880
RB06	47R0 OHM 5% 0,70W		10181910
RB07,09,**RM**17, **RP**050,**RV**601	10R0 OHM 5% 0,25W	⚠	15009580
RB21	619R0 OHM 1% 0,40W		15019980
RB24,44,64	39K0 OHM 2% 4W		10358890
RB27,47,67	2K2 OHM 5% 0,50W	⚠	10152130
RB31,51,71	330R0 OHM 10% 0,50W		14050190
RB41	681R0 OHM 1% 0,40W		15020320
RB61	649R0 OHM 1% 0,40W		15020140
RF011	1R5 OHM 5% 0,50W	⚠	15022560
RF012,013	1R0 OHM 1% 0,70W		10254220
RF015	15R0 OHM 265V PTC	⚠	10237730
RF020	270R0 OHM 1% 0,70W		10302230
RL013	4R7 OHM 5% 0,50W	⚠	15010040
RL015	1R0 OHM 5% 0,25W	⚠	15009730
RL029	2R2 OHM 5% 0,50W	⚠	10440420
RL037	1K0 OHM 10% 0,50W		10393870
RL040	0R27 OHM 5% 2,50W		10263600
RL043	2R2 OHM 5% 0,70W	⚠	13000480
RL047	47RO OHM 5% 0,50W		10233220
RL052	46K4 OHM 1% 0,70W		10403710
RL081	68K1 OHM 1% 0,12W		10433880
RL082	61K9 OHM 1% 0,12W		10516840
RM26	330R0 OHM 5% 0,35W	⚠	10248240
RM30	22R0 OHM 5% 0,25W	⚠	35031220
RM57,72,87	221R0 OHM 1% 0,40W		15014310
RM58,73,88	274R0 OHM 1% 0,40W		15015080
RM61,76,91	3K3 OHM 1% 0,40W		15017250
RP020	0R12 OHM 5% 2,50W		10334390
RP022	100R0 OHM 5% 4,50W		10379830
RP025	33K0 OHM 5% 2W		13001680
RP05	18R0 OHM 220V PTC	⚠	41398800
RP066	4K22 OHM 1% 0,40W		15018600
RP10	2R7 OHM 5% 4,50W		10379110
RP100	10M0 OHM 5% 0,70W	⚠	10074320
RP112	1K2 OHM 5% 2W		10134060
RS42	4R7 OHM 5% 0,25W		35032200
RV041	8R2 OHM 5% 0,25W	⚠	15010150

CB01	10N0F 3K0V		14036450
CB67,76	100P0F 20% 2K0V		14006310
CL030	1N9F 5% 2K0V		13071270
CL031	11N6F 2,5% 2K0V		40406501
CL032	24N0F 5% 400V		10477940
CL034	12N0F 5% 400V		43324600
CL036	2U2F 20% 250V		10190240
CL037	410N0F 5% 400V		10180780
CL038,039	27N0F 5% 250V		50895120
CL041,043	330P0F 20% 1K0V		14035270
CL046	10U0F 20% 250V		13039430
CL052	10N0F 5% 400V		14035870
CL084	3N9F 5% 400V		10522580
CL146	150P0F 20% 1K0V		30937590
CM48	470P0F 10% 400V		14002340
CP01,02	100N0F 20% 275V	⚠	10331520
CP020,13	150U0F 385V		43424800
CP021	150P0F 2K0V		10099380
CP022,111	470P0F 10% 2K0V		10099390
CP023	2N2F 10% 1K0V		13090980
CP050,053	330P0F 20% 400V		14002220
CP10	1N5F 10% 1K0V		20338740
CP100	1N5F 20% 400V	⚠	10344860
CP11,12	4N7F 1K0V		10058740
CP112	3N3F 5% 630V	⚠	10490550
CP135,137,138	470P0F 20% 1K0V		40434510

LL001	DRIVER		10468760
LL008	DSTGDS35	⚠	10468070
LL037		⚠	10518230
LP01		⚠	10203560
LP020	SMT89LZ	⚠	10459670
LP070	DRIVER	⚠	60412091

OTHER PARTS
AUTRES PIECES
SONSTIGE TEILE
ALTRE PARTI
OTRAS PIEZAS

BB10	CATHODE RAY TUBE SOCKET SUPPORT TUBE CATHODIQUE BILDROEHRENFASSUNG SUPPORTO TUBO CATODICO SOPORTE T.R.C	⚠	80298800
BM10	CINCH SOCKET ASSY PLAQUETTE PRISES CINCH CHINCH BUCHSEN-EINHEIT ASSIEME PRESA CINCH PLAQUETA TOMA CINCH		10487650
BM11	SVHS SOCKET PRISE SVHS S-VHS-BUCHSE PRESA SVHS TOMA SVHS		20392900
BM12	HEADPHONE PLUG PRISE CASQUE BUCHSE KOPFHOERER PRESA JACK TOMA JACK		20483040
BS04	CINCH SOCKET PRISE CINCH CHINCH-BUCHSE PRESA CINCH TOMA CINCH		10368990
BX100,200,300	SCART SOCKET PRISE PERITEL EURO-AV-BUCHSE EUROPRESA NORMALIZZATA EUROCONECTOR		10402480
BX803	JACK SOCKET PRISE JACK JACK BUCHSE PRESA JACK TOMA JACK		10447830
FP01	2A5T TIME-LAG FUSE 2A5T FUSIBLE TEMPORISE 2A5T SICHERUNG 2A5T FUSIBILE TEMPORIZZATO 2A5T FUSIBLE TEMPORIZADO	⚠	10246750
IR001	IC SUPPORT 4X17 SUPPORT CI 4X17 IC-FASSUNG 4X17 SUPPORTO CI 4X17 SOPORTE CI 4X17		67626900

NH001	CTT5000T UHF/VHF TUNER CTT5000T TETE UHF/VHF CTT5000T UHF/VHF TUNER CTT5000T TUNER UHF/VHF CTT5000T SINTONIZADOR UHF/VHF	R	20808880
SM01,02,03, 04,05,06	MICROSWITCH MICRO CONTACTEUR MIKROSCHALTER MICROINTERRUTTORE MICROCONTACTOR		20540300
SP05	RELAY 12V RELAIS 12V RELAIS 12V RELE 12V RELE 12V	⚠	90294100

EQUIPMENT/PRESENTATION
EQUIPEMENT/PRESENTATION
AUSSTATTUNG/GEHAEUSE
PARTI VARIE
EQUIPO/PRESENTACION

CABINET WITH FRONT PANEL COFFRET EQUIPE AVEC FACADE GEHAEUSE KPL MIT FRONTPLATTE MOBILE COMPLETO MUEBLE EQUIPADO		25295890
REAR PANEL DOS RUECKWAND PANNELLO POSTERIORE TAPA POSTERIOR	⚠	25300600
LOUDSPEAKER GRID BOOMER GRILLE HAUT PARLEUR GRAVES LAUTSPRECHER GITTER TIEFTOENER GRIGLIA ALTOPARLANTE SUPERIOR REJILLA ALTAVOZ GRAVES		25248120
LOUSPEAKER GRID LEFT/RIGHT GRILLE HAUT PARLEUR GAUCHE/DROIT LAUTSPRECHERGITTER LINKS/RECHTS GRIGLIA ALTOPARLANTE SINISTRO/DESTRO REJILLA ALTAVOZ IZQUIERDA/DERECHA		25260740
CHASSIS SUPPORT SUPPORT CHASSIS CHASSIS HALTER SUPPORTO CHASSIS SOPORTE CHASSIS		25304660
LOUDSPEAKER BOX ENCEINTE ACOUSTIQUE LAUTSPRECHERBOX CASSA ACUSTICA CAJA ACUSTICA		25295880
16R OHM 10W LOUDSPEAKER 60X125 16R OHM 10W HAUT PARLEUR 60X125 16R OHM 10W LAUTSPRECHER 60X125 16R OHM 10W ALTOPARLANTE 60X125 16R OHM 10W ALTAVOZ 60X125		10467050
8R OHM 15W LOUDSPEAKER 27X42 8R OHM 15W HAUT PARLEUR 27X42 8R OHM 15W LAUTSPRECHER 27X42 8R OHM 15W ALTOPARLANTE 27X42 8R OHM 15W ALTAVOZ 27X42		10317160
4R OHM 25W LOUDSPEAKER D:130 4R OHM 25W HAUT PARLEUR D:130 4R OHM 25W LAUTSPRECHER D:130 4R OHM 25W ALTOPARLANTE D:130 4R OHM 25W ALTAVOZ D:130		10459540
ON/OFF SWITCH CONTACTEUR MARCHE/ARRET EIN-AUS SCHALTER CONTATTORE ACCESO/SPENTO CONTACTOR MARCHA/PARADA	⚠	10276500
ON/OFF BUTTON TOUCHE MARCHE/ARRET EIN-AUS TASTE TASTO ACCESO/SPENTO TECLA MARCHA/PARADA		25290950
BUTTON STRIP BARRETTE DE TOUCHES TASTENLEISTE PIATTINA TASTI PLACA DE TECLAS		25253080
POWER SUPPLY LEAD CORDON D'ALIMENTATION NETZKABEL CAVO DI ALIMENTAZIONE CABLE DE ALIMENTACION	⚠	10260880
A68EGD038X322(A) CATHODE RAY TUBE A68EGD038X322(A) TUBE CATHODIQUE A68EGD038X322(A) FARBBILDROEHRE A68EGD038X322(A) TUBO CATODICO A68EGD038X322(A) T.R.C	⚠	10524710
DEGAUSSING COIL BOBINE DE DEMAGNETSATION ENTMAGNETISIERUNGSSPULE BOBINA DI SMAGNETIZZAZIONE BOBINA DE DESIMANTACION	⚠	47320181
RCT4000 REMOTE CONTROL RCT4000 TELECOMMANDE RCT4000 FERNBEDIENUNG RCT4000 TELECOMANDO RCT4000 TELEMANDO		10525960
FOLDING BOX EMBALLAGE CARTON KARTON IMBALLAGGIO CARTONE EMBALAJE CARTON		25299490
FITTING DOWNER CALE INFERIEURE POLSTER UNTEN DISTANZIATORE INFERIORE CALZO INFERIOR		25258040
FITTING UPPER CALE SUPERIEURE POLSTER OBEN DISTANZIATORE SUPERIORE CALZO SUPERIOR		25309550

INSTRUCTIONS
NOTICES
ANLEITUNGEN
INSTRUCZIONI
MANUALE

29DU88M PARTS LIST 29DU88M LISTE DE PIECES DETACHEES 29DU88M ERSATZTEILLISTE 29DU88M LISTA PARTI DI RICAMBIO 29DU88M LISTA DE PIEZAS DE REPUESTO	35048980
ICC19 100HZ SERVICE MANUAL ICC19 100HZ DOC TECHNIQUE ICC19 100HZ TECHNISCHE DOKUMENTATION ICC19 100HZ DOCUMENTAZIONE TECNICA ICC19 100HZ DOCUMENTACION TECNICA	35047630
29DU88M UM THOMSON D/I/GB/E/F 29DU88M NU THOMSON D/I/GB/E/F 29DU88M BA THOMSON D/I/GB/E/F 29DU88M IU THOMSON D/I/GB/E/F 29DU88M IU THOMSON D/I/GB/E/F	25292700
29DU88M UM THOMSON NL/S/DK/RU 29DU88M NU THOMSON NL/S/DK/RU 29DU88M BA THOMSON NL/S/DK/RU 29DU88M IU THOMSON NL/S/DK/RU 29DU88M IU THOMSON NL/S/DK/RU	25292710

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THOMSON MULTIMEDIA 46, Quai Alphonse Le Gallo 92648 Boulogne Cedex FRANCE

THOMSON MULTI MEDIA

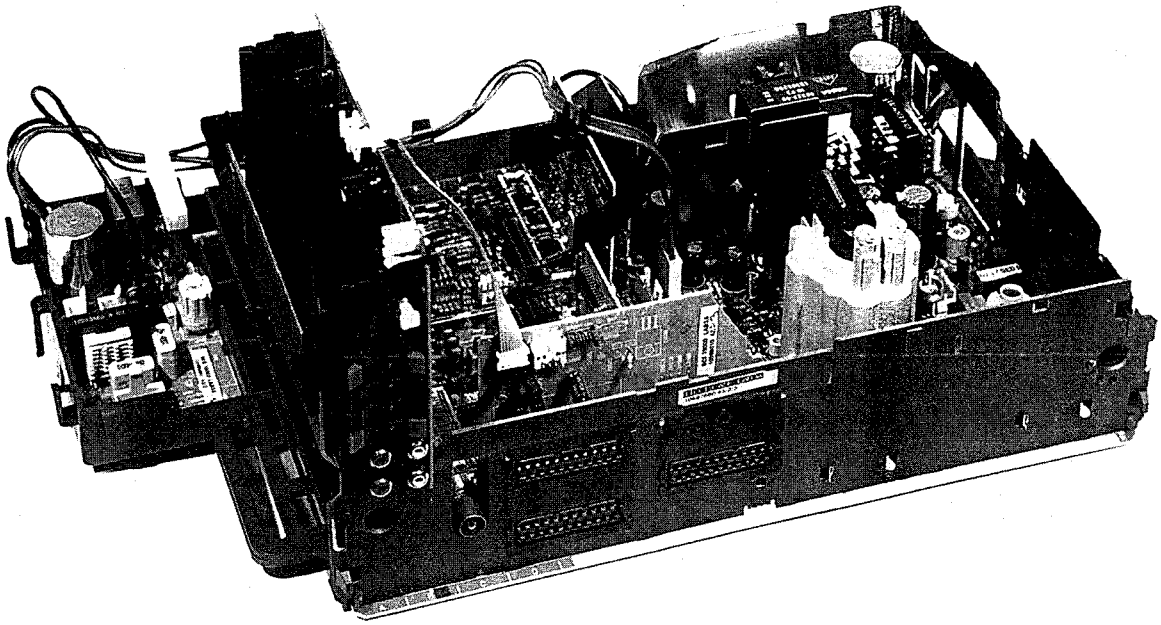
Brandt FERGUSON **NORDMENDE** SABA **TELEFUNKEN** **THOMSON**

TV

SERVICE MANUAL
DOCUMENTATION TECHNIQUE
TECHNISCHE DOKUMENTATION
DOCUMENTAZIONE TECNICA
DOCUMENTACION TECNICA

ICC19 50 Hz

ICC19 A5D00240 00
A5D00740 00
A5E00240 00
A5F00240 00



WARNING : *Before servicing this chassis read the safety recommendations.*
ATTENTION : *Avant toute intervention sur ce châssis, lire les recommandations de sécurité.*
ACHTUNG : *Vor jedem Eingriff auf diesem Chassis, die Sicherheitsvorschriften lesen.*
ATTENZIONE : *Prima di intervenire sullo chassis, leggere le norme di sicurezza.*
IMPORTANTE : *Antes de cualquier intervención, leer las recomendaciones de seguridad.*

Code : 350 476 40 - 0997 / 18M - ICC19 Print. ROSSEELS PRINTING : 01 53 01 11 11

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⚠ Indicates critical safety components, and identical components should be used for replacement. Only then can the operational safety be garanteed.

Le remplacement des éléments de sécurité (repérés avec le symbole ⚠) par des composants non homologués selon la Norme CEI 65 entraine la non-conformité de l'appareil. Dans ce cas, la responsabilité du fabricant n'est plus engagée.

Wenn Sicherheitsteile (mit dem Symbol ⚠ gekennzeichnet) nicht durch Original - Ersatzteile ersetzt werden, erlischt die Haftung des Herstellers.

La sostituzione degli elementi di sicurezza (marcati con il segno ⚠) con componenti non omologati secondo la norma CEI 65 comporta la non conformitá dell'apparecchio. In tal caso è "esclusa la responsabilità " del costruttore.

La sustitución de elementos de seguridad (marcados con el simbolo ⚠) por componentes no homologados segun la norma CEI 65, provoca la no conformidad del aparato. En ese caso, el fabricante cesa de ser responsable.

MEASUREMENT CONDITIONS - CONDITIONS DE MESURES - MESSBEDINGUNGEN CONDIZIONI DI MISURA - CONDICIONES DE MEDIDAS

RECEIVER : On UHF,input level : 1 mV, bar test pattern :
- PAL, I standard, 100% white.

Via the scart socket, input level : 1 Vpp, bar test pattern :

Colour, contrast and brightness at mid-position, sound at minimum.
Programme selected : PR 01.

DC voltages measured between the point and earth using a digital voltmeter.

RECEPTEUR : En UHF, niveau d'entrée 1 mV mire de barres
- SECAM, Norm L, Blanc 100%.

Par la prise Péritélévision, niveau d'entrée 1 Vcc, mire de barres .

Couleur, contraste, lumière à mi-course, son minimum.
Programme affecté PR 01.

Tensions continues relevées par rapport à la masse avec un voltmètre numérique.

EMPFÄNGER : Bei UHF Eingangspegel 1 mV, Farbbalken :
- PAL, Norm G, Weiss 100%.

Über die Scartbuchse : Eingangspegel 1 Vss, Farbbalken :

Farbe, Kontrast, Helligkeit in der Mitte des Bereichs, Ton auf Minimum.
Zugeordnetes Programm PR 01.

Gleichspannungen mit einem digitalen Voltmeter zur Masse gemessen.

RICEVITORE : In UHF, livello d'entrata 1 mV, monoscopio per barre :
- PAL, norma G. bianco 100%.

Par la presa SCART, livello d'entrata 1 Vcc, monoscopio per barre :

Colore, Contrasto, Luce a metá corsa, Suono minimo.
Programma designato PR 01.

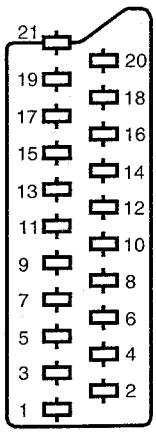
Tensioni continue rilevate rispetto alla massa con un voltametro numerico.

RECEPTOR : En UHF, nivel de entrada 1 mV, mira de barras :
- PAL, norma G, blanco 100%.

Por la toma Peritelevision, nivel de entrada 1 Vpp mira de barra.

Color, Contraste, luz a mitad de carrera. Sonido mínimo.
Programa afectado PR 01.

Tensiones continuas marcadas en relacion a la masa con un voltimetro digital.



NOTE : (MAIN) ... etc. identifies each pcb module.

NOTE : (MAIN) ... etc. repères des platines constituant l'appareil.

HINWEIS : (MAIN) ...usw. Kennzeichnung der Platinen, aus denen das Gerät zusammengesetzt ist.

NOTA : (MAIN) ... ecc. indicazioni delle piastre che costituiscono l'apparecchio.

NOTA : (MAIN) ... etc. marcas de las placas que constituyen el aparato.

		ENGLISH	FRANÇAIS	DEUTSCH	ITALIANO	ESPAÑOL
1	⊖→	AUDIO "R"	AUDIO "D"	AUDIO "R"	AUDIO "D"	AUDIO "D"
2	→⊕	AUDIO "R"	AUDIO "D"	AUDIO "R"	AUDIO "D"	AUDIO "D"
3	⊖→	AUDIO "L"	AUDIO "G"	AUDIO "L"	AUDIO "S"	AUDIO "I"
4	⊥	AUDIO	AUDIO	AUDIO	AUDIO	AUDIO
5	⊥	" BLUE "	" BLEU "	"BLAU"	"BLU"	"AZUL"
6	→⊕	AUDIO "L" MONO	AUDIO "G" MONO	AUDIO "L" MONO	AUDIO "S" MONO	AUDIO "I" MONO
7	→⊕	" BLUE "	" BLEU "	"BLAU"	BLU	AZUL
8	→⊕	SLOW SWITCH	COMMUT. LENTE	AV UMSCHALTUNG	"COMMUTAZIONE LENTA"	"CONMUTACION LENTA"
9	⊥	" GREEN "	"VERT"	"GRÜN"	"VERDE"	"VERDE"
10	NC					
11	→⊕	" GREEN "	"VERT""	"GRÜN"	"VERDE"	"VERDE"
12	NC					
13	⊥	" RED "	"ROUGE"	"ROT"	"ROSSO"	"ROJA"
14	NC					
15	→⊕	" RED "	"ROUGE"	"ROT"	"ROSSO"	"ROJA"
16	→⊕	FAST SWITCH	COMMUT. RAPIDE	AUSTASTUNG	"COMMUTAZIONE RAPIDA"	"CONMUTACION RAPIDA"
17	⊥	VIDEO	VIDEO	VIDEO	VIDEO	VIDEO
18	⊥	FAST SWITCH	COMMUT. RAPIDE	AUSTASTUNG	"COMMUTAZIONE RAPIDA"	"CONMUTACION RAPIDA"
19	⊖→	VIDEO	VIDEO	VIDEO	VIDEO	VIDEO
20	→⊕	VIDEO OR "SYNC"	VIDEO SYNCHRO	VIDEO ODER SYNCHRO	VIDEO O SINCRO	VIDEO O SINCRO
21	⊖→	PLUG SCREEN BOX	BLINDAGE PRISE	ABSCHIRMUNG DES STECKERS	ARMATURA DELLA SPINA	BLINDAJE DEL ENCHUFE

⊖→ : OUTPUT - SORTIE - AUSGANG - USCITA - SALIDA

→⊕ : INPUT - ENTRÉE - EINGANG - ENTRATA - ENTRADA

⊥ : EARTH - MASSE - MASSE - MASSA - MASA

INFORMATION - INFORMATIONS - INFORMATIONEN - INFORMAZIONE - INFORMACIONES

CHASSIS DESIGNATION - DESIGNATION DES CHASSIS -BEZEICHNUNG DES CHASSIS - DESCRIZIONE DEI TELAI - DESIGNACIÓN DE LOS CHASIS

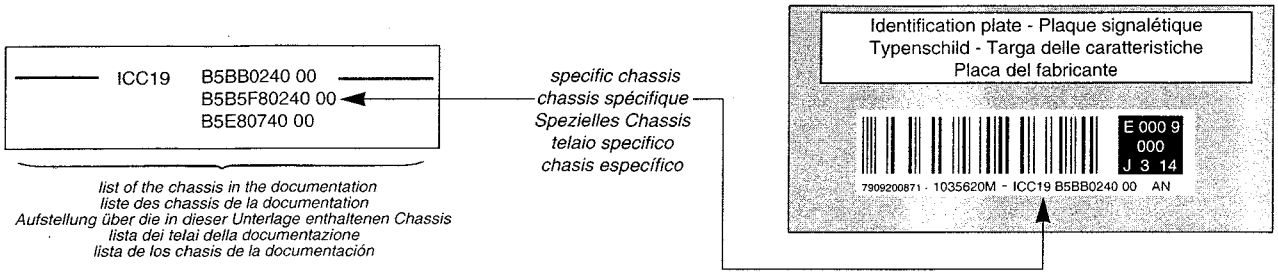
(GB)
The references mentioned on the cover give the list of chassis covered in the present document.
The designation of a specific chassis equipping the receptor is marked on the identification plate placed at the back of the apparatus.

(F)
Les références indiquées en couverture donnent la liste des chassis traités dans le présent document.
La désignation d'un chassis spécifique équipant le récepteur est inscrite sur la plaque signalétique située à l'arrière de l'appareil.

(D)
Die auf dem Deckblatt angegeben Nummern sind die in dieser Unterlage enthaltenen Chassis

(I)
I riferimenti indicati in copertina danno la lista dei telai trattati nel presente documento.
La descrizione di un telaio specifico installato sul ricevitore figura sulla targa delle caratteristiche situata sulla parte posteriore dell'apparecchio.

(E)
Las referencias indicadas en la cubierta dan la lista de los chasis tratados en el presente documento.
La designación de un chasis específico que equipa el receptor se inscribe en la placa del fabricante, situada en la parte trasera del aparato.



list of the chassis in the documentation
liste des chassis de la documentation
Aufstellung über die in dieser Unterlage enthaltenen Chassis
lista dei telai della documentazione
lista de los chasis de la documentación

RECEIVER COMPOSITION - COMPOSITION DES RECEPTEURS - BESTÜCKUNG DER EMPFÄNGER - COMPOSIZIONE DEI RICEVITOR - COMPOSICIÓN DE LOS RECEPTORES

Chassis identification table:
1- Main chassis designation code
2- Chassis configuration (modules) and the page number's where they are described.
3- The chassis - environment pair that are contained in the receptors described in the present documentation.

Le tableau ci-dessous regroupe :
1- La désignation des chassis
2- L'environnement électronique de chaque chassis (modules) et le numéro de page où il est décrit.
3- L'association chassis-environnement composant les récepteurs décrits dans la présente documentation.

Die nachfolgendeTabelle beinhaltet:
1 - Die Chassisbezeichnung
2 - Die elektrischen Baugruppen (Module) der Chassis und die Seitenzahl auf der sie abgebildet sind.
3 - Die Chassis und Module der Empfänger aus dieser Dokumentation.

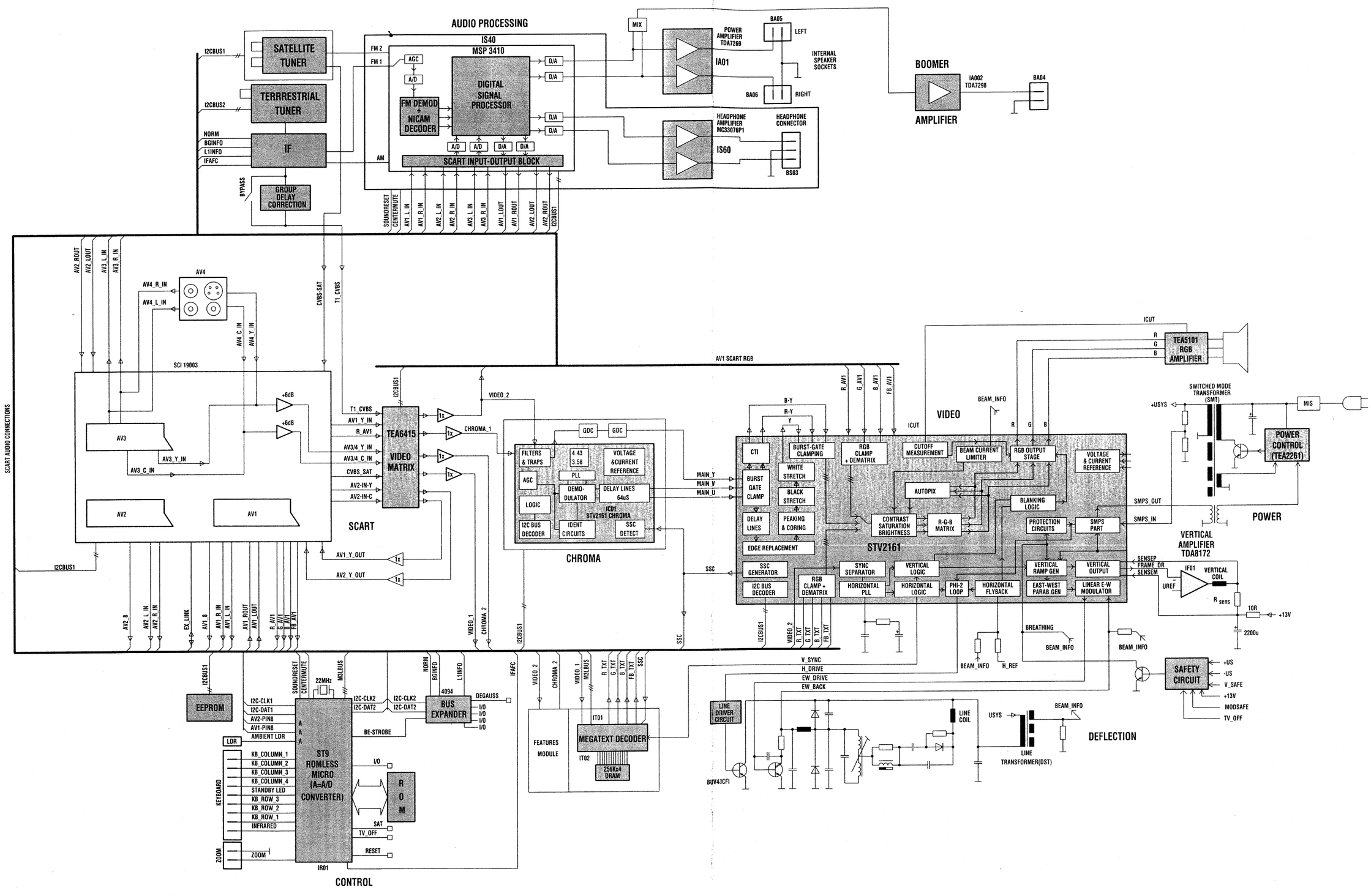
La tabella qui di seguito contiene:
1 - La descrizione dei telai
2 - La configurazione di ogni telaio (moduli) e il numero di pagina nella quale è descritto
3 - L'abbinamento telaio-struttura che compone i ricevitori descritti nella presente documentazione

El cuadro siguiente agrupa:
1 - La designación de los chasis
2 - El entorno electrónico de cada chasis (módulos) y el número de página donde está descrito.
3 - La asociación chasis - entorno que compone los receptores descritos en la presente documentación

ICC19 50 Hz

DESCRIPTION	BLOCK CHASSIS	ADJUST. DIAGRAM	PCB MAIN	SCHEMA MAIN	CHROMA MAIN	CRT MODULE	ZOOM MODULE	TELETEXT MODULE	SCART MODULE	AUDIO MODULE	KDB - FCB MODULE
ICC19 A5D00240 00	5 to 6	7 to 16	17 to 23	24 to 30	29 - 33	31 to 34	45 to 46	36 to 38	39 to 41	42 to 44	47 to 49
ICC19 A5D00740 00	5 to 6	7 to 16	17 to 23	24 to 30	29 - 33	31 to 34	45 to 46	36 to 38	39 to 41	50 to 53	47 to 49
ICC19 A5E00240 00	5 to 6	7 to 16	17 to 23	24 to 30	29 - 33	31 to 34	-	36 to 38	39 to 41	42 to 44	47 to 49
ICC19 A5F00240 00	5 to 6	7 to 16	17 to 23	24 to 30	29 - 33	31 to 34	-	36 to 38	39 to 41	42 to 44	47 to 49

BLOCK DIAGRAM - SCHEMA SYNOPTIQUE - BLOCKSCHALTBILD - SCHEMA A BLOCCI - ESQUEMA DE BLOQUES



Do not disconnec
Repairs on power
only with isolating

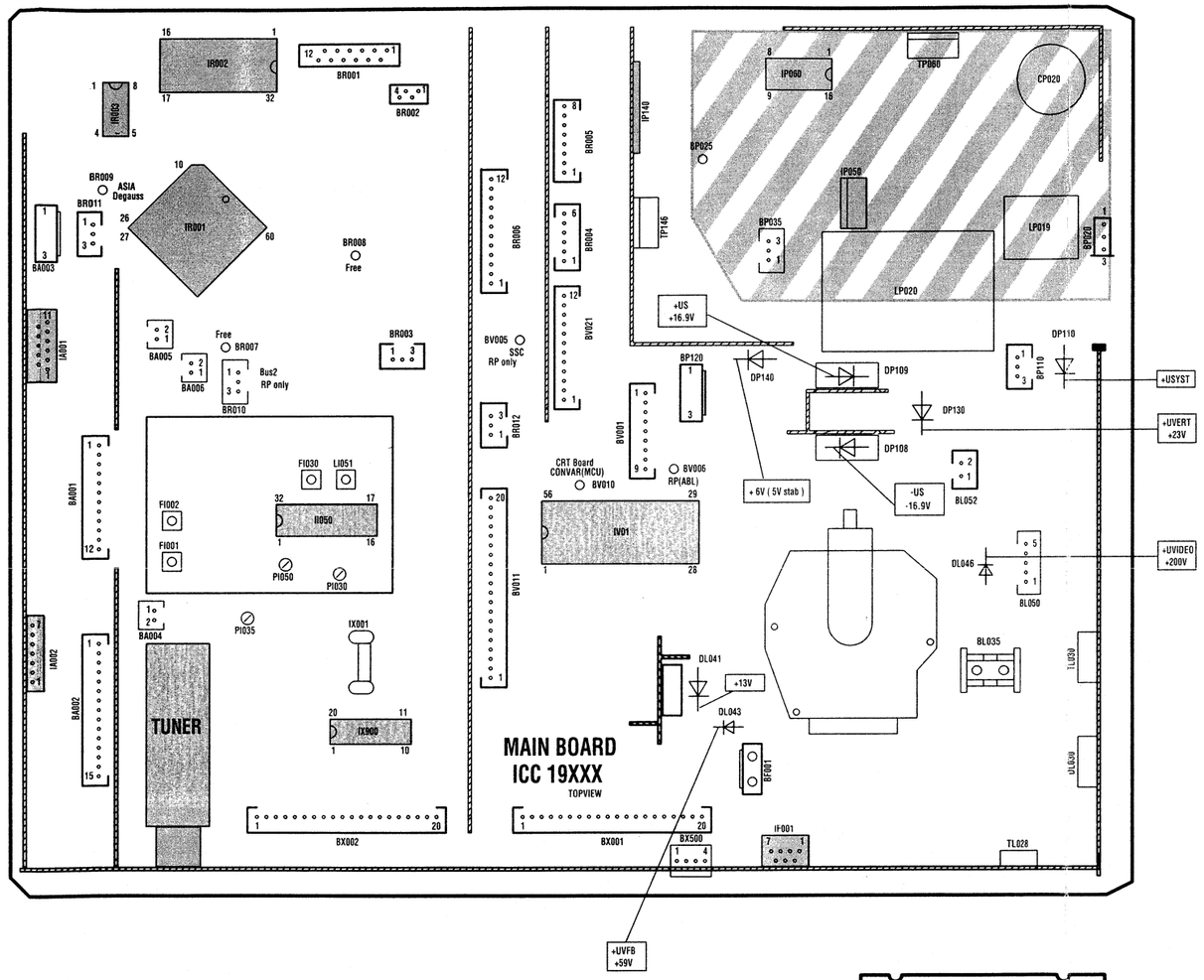
Ne pas retirer les
N'effectuer les tra
reliée au secteur
transformateur d'

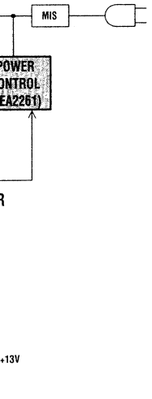
Module nicht bei
Servcearbeiten ar
Regeltrenntrafos

Non scollegarei
intraprendere ripa
con transformato

No desconectar l
Las reparaciones
deben ser ejecut
separación.

LOCATION OF CONTROLS - EMPLACEMENT DES REGLAGES - SERVICE LAGEPLAN - POSIZIONE REGULATORI DI SERVIZIO - SITUACIÓN DE LOS AJUSTES





Do not disconnect modules when they are energized !
Repairs on power supply section are to be carried out only with isolating transformer.

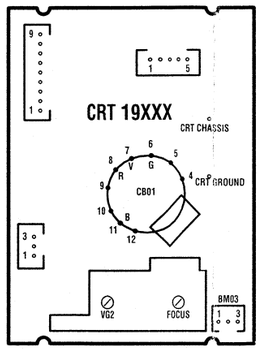
Ne pas retirer les modules lorsqu'ils sont sous tension.
N'effectuer les travaux de maintenance sur la partie reliée au secteur (Switch mode) qu'au travers d'un transformateur d'isolement.

Module nicht bei eingeschaltetem Gerät entfernen !
Servcearbeiten am Netzteil nur unter Verwendung eines Regeltrennntrafos durchlühren.

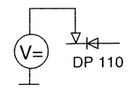
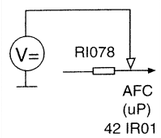
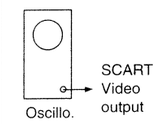
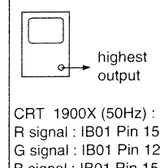
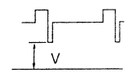
Non scollegarei moduli quando sono alimentati !
intraprendere riparazioni sulla sezione alimentatore solo con transformatore isolante.

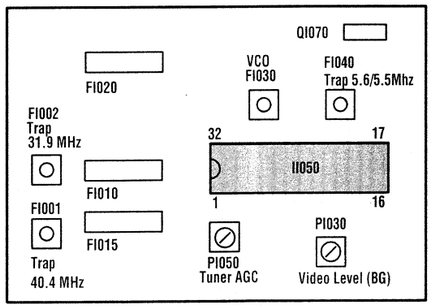
No desconectar los módulos cuando están activados !
Las reparaciones en la sección de alimentación de energia deben ser ejecutadas solamente con un transformador de separacion.

Part of Board connected to mains supply.
Partie du châssis reliée au secteur.
Primärseitedes Netzteils
Parte del panello collegato alla rete di alimentazione
Parte del chasis conectada a la red



ADJUSTMENTS - REGLAGES - EINSTELLUNGEN - REGOLAZIONE - AJUSTES

U Sys	SERVICE MODE	Standard TV - Settings : OMA Position TV to AV1 : Black test pattern		<table><tr><th>TUBE NAME</th><th>DESCRIPTION</th><th>Usys jumper</th><th>Usys</th></tr><tr><td>A66ECY 13X 15</td><td>4/3 28" MP</td><td>JP914</td><td>132V +/- 0.5V</td></tr><tr><td>A59EGD048X300</td><td>4/3 25" SF</td><td>JP915</td><td>131V +/- 0.5V</td></tr><tr><td>A68EGD038X300</td><td>4/3 29" SF</td><td>JP915</td><td>131V +/- 0.5V</td></tr><tr><td>W66EGV023X115</td><td>16/9 28"SF</td><td>JP917</td><td>137V +/- 0.5V</td></tr><tr><td>W76EGX023X115</td><td>16/9 32"SF</td><td>JP917</td><td>137V +/- 0.5V</td></tr></table>
IF Alignment VCO Standard BG	FI030	Switch set to standard BG IF Signal 38.9 MHz (BG) 30 mV TUNER 11 NH01 G 75Ω		Adjust FI30 / PI54 for 2,5VDC +/-0.1V
VIDEO-LEVEL Alignment	PI030 PI035	Standard Signal (BG / L) 15kHz test pattern 3 mV TV set Antenna G 75Ω		Adjust PI030 : standard BG Adjust PI035 : standard L for V = 0,7 Vpp (Black/white level)
V G2 METHOD 1 Measurment method	G2 poten-tiometer	Standard TV - Settings : OMA Position TV to AV1 : Black test pattern	 CRT 1900X (50Hz) : R signal : IB01 Pin 15 G signal : IB01 Pin 12 B signal : IB01 Pin 15	 1 - Adjust VG2 : V= 160V +/- 5 V 2 - Adjust Focus 3 - Adjust VG2 : V= 160V +/- 3V
METHOD 2 Cut-off counter method SERVICE MODE	SERVICE MODE	Standard TV - Settings : OMA Position No test pattern (generated by internal text processor).		Adjust R-Cut off and G-Cut-off to 80H temporary. Select G2 Alignment in Service Mode Adjust the lowest value to: Select "Restore" in Service Mode and press "OK" to restore the cut-off values. <table><tr><th>Tube Type</th><th>Value</th></tr><tr><td>A66ECY</td><td>50H</td></tr><tr><td>A79ECU</td><td>-</td></tr><tr><td>A89AEJ</td><td>-</td></tr><tr><td>A59EGD</td><td>60H</td></tr><tr><td>A68EGD</td><td>50H</td></tr><tr><td>W56EGV</td><td>-</td></tr><tr><td>W66EGV</td><td>50H</td></tr><tr><td>W76EGX</td><td>60H</td></tr></table>
FOCUS	FOCUS	Test pattern (standard values)		Sharp picture



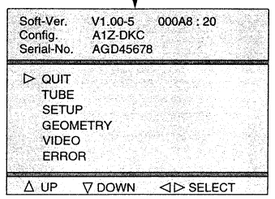
SERVICE MODE (GB) | MODE SERVICE (F) | SERVICE - MODE (D) | SERVICE - MODE (I) | MODO SERVICIO

I - ENTER/EXIT SERVICE MODE - ENTREE/SORTIE DU MODE SERVICE - EIN-AUSTIEG SERVICE MODE - ACCESSO/USCITA ALLA/DALLA FUNZIONE - ENTRADA/SALIDA MODO SERVICIO

1 ACCESSING SERVICE MODE

TV Control Panel Access

- Turn "Off" the TV using the **ON/OFF** button.
- Press the **PR-** and **VOL-** buttons ,hold them down and switch "On" the TV with the **ON/OFF** button.
- After the normal switch on time the main service menu appears on the screen.



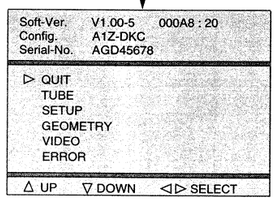
Note :

In service mode :
- *The child lock function is re-initialized*
- *The look function (PIN Number) is ignored.*
- *Clear any wake-up/sleep timers*
- *Pin 8 of the scart plug has to be ignored.*
- *AV- Link WSS detection , EPG and Teletext have to be disabled.*
- *Automatic stand-by functions, in case of no antenna signal have to be disabled.*
- *Contrast, colour, brightness : factory settings.*
- *Sharpness : middle (nominal)*
- *Contrast expander to low.*
- *Install Mode disabled.*
- *Default format and zoom..*

1 ACCES AU MODE SERVICE

Accès avec le clavier du téléviseur

- Arrêter le TV avec la touche **M/A.**
- Tout en appuyant sur les touches **PR -** et **VOL - ,** mettre le TV en service à l'aide de la touche **M/A.**
- Maintenir enfoncées les touches **PR -** et **VOL -**.
  Le menu suivant apparaît.



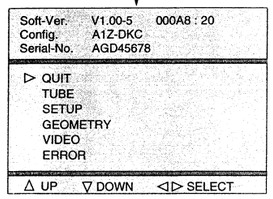
Note :

En mode service:
- *Le verrouillage parental est effacé (réinitialisé).*
- *La fonction de verrouillage (Pin number) est ignorée.*
- *La programmation des heures «reveille/matin» est annulée.*
- *Possibilité de passer en mode service avec commutation lente active.*
- *AV- Link , la détection WSS, l'EPG et le Vidéotexte ne sont pas validés.*
- *La fonction de stand-by automatique en cas d'absence de signal d'antenne n'est pas validée.*
- *Les valeurs de réglages usine sont affectées au contraste, à la couleur et à la lumière.*
- *Le contour est appelé à sa valeur moyenne.*
- *L'expansion contraste est au niveau bas.*
- *Le mode d'installation et l'ambiance «Light sensor» ne sont pas valdes.*
- *Zoom et format ignorées.*

1 EINSTIEG IN DEN SERVICE MODE

Zugriff über die Tastatur des Fernsehgeräts

- Fernsegerät über die EIN/AUS - Taste ausschalten.
- Gleichzeitig die Tasten PR- und VOL- drücken und den Fernseher über die EIN/AUS-Taste einschalten.
- Die Tasten PR- und VOL - gedrückt halten.



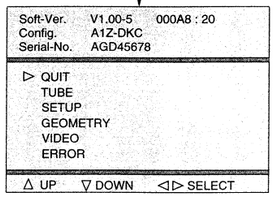
Anmerkung :

Im SERVICE MODE :
- *wird die Sperrfunktion (PIN-Nummer) ignoriert und die Kindersicherung gelöscht (reinitialisiert).*
- *werden alle Ein- und Ausschaltzeitgeber gelöscht.*
- *wird die SCART - Scaltspannung ignoriert.*
- *werden AV- Link WSS, EPG und Teletext gesperrt*
- *wird die Automatische Abschaltung bei fehlendem Antennensignal gesperrt.*
- *werden Kontrast, Farbe und Helligkeit auf standardwerte gesetzt.*
- *wird die bildschärfe auf Mittelstellung (nominal) gesetzt.*
- *wird der Kontrast-Expander auf "gering.." gesetzt.*
- *wird der Installa'ions Modus gesperrt.*
- *wird das Standardformat bzw. der Standard-Zoom-modus gewählt.*

1 ACCESSO AL SERVICE MODO

tramite i comandi del televisore

- Spegnere il TV mediante il pulsante ON/OFF.
- Premere i tasti **PR- e VOL-** accendendo il TV con il pulsante ON/OFF.
- Premere i pulsanti **PR - e VOL -**.



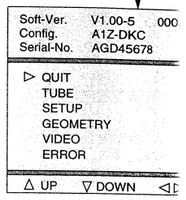
Nota :

Nel service mode:
- *la funzione Blocco (Numero Pin) viene ignorata e la funzione Blocco Bambini è reinizializzata.*
- *Cancellare la programmazione sveglia*
- *Il piedino 8 della scart deve essere ignorato.*
- *I riconoscimenti AV-Link WSS, EPG e televideo deveno essere disabilitati.*
- *Funzione automatica di standby, nel caso di mancanza del segnale d'antenna deve essere disabilitata.*
- *Contrasto, colore, luminosità : regolazioni di fabrica.*
- *Nitidezza: media (nominale)*
- *Espansore contrasto troppo basso.*
- *IModo Install disabilitato.*
- *Formato default e zoom.*

1 ACCESO AL MODO SERVICIO

Acceso panel contro

- Apague la TV con el botón MARCHA:PAR
- Pulse los botones **PR -** y **VOL -** y sin sol MARCHA:PARADA.
- Libere los botones **PR -** y **VOL -** .



Nota :

En modo servicio:
- *Se ignora la función de bloqueo y se inic ninos".*
- *Anula todos las horas programadas*
- *La patilla 8 del SCART es ignorada*
- *La detección WSS AV Link, EPG, y Tele*
- *El apagado automático en caso de ause desactivado.*
- *El contraste,color y brillo son puestos a l*
- *la nitidez es puesta al punto medio.*
- *La expansión de contrast al nivel bajo*
- *Modo Instalación es desactivado.*
- *Zoom y formato ignorados.*

2 TEMPORARY EXIT FROM SERVICE MODE

- Press Exit on the Remote control.
- Everyday use menu can be accessed via Menu button.

- Field Service Menu can be re-entrered via Blue button.

2 SORTIE TEMPORAIRE DU MODE SERVICE

- Utiliser la touche Exit de la télécommande.
- Le menu utilisateur peut être accessible via la touche «Menu».

- Pour entrer à nouveau dans le mode service utliliser la touche bleue.

2 VORÜBERGEHENDES VERLASSEN DES SERVICE MODUS

- Auf der Fernbedienung EXIT drücken.
- Mit der Taste Menü gelangen Sie zum Menü Übersicht

- Mit der blauen Taste gelangen sie wieder zum Service-Menü.

2 USCITA TEMPORANEA DAL SERVICE MODE

- Premere Exit sul telecomando.
- Al menu di uso quotidiano si accede attraverso il pulsante Menu.

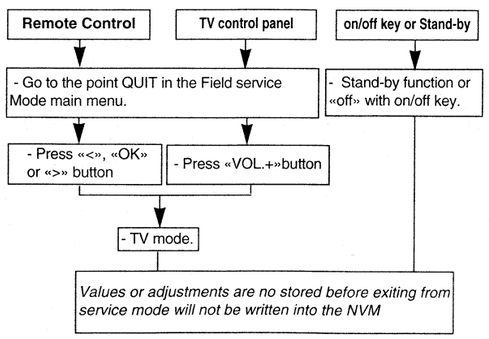
- É possibile rientrate nel Menu Field Service attraverso il pulsante Blue.

2 SALIDA TEMPORAL DEL MODO SERV

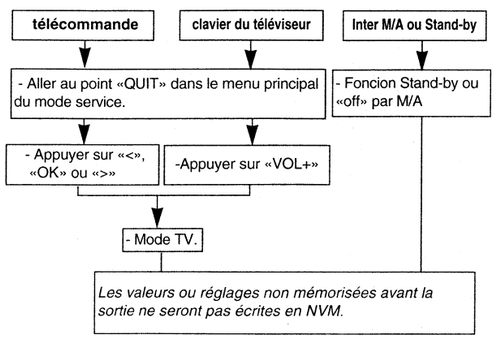
- Pulse Salir en el mando a distancia
- Con el botón Menu puede acceder al menú d

- Puede entrar al Menú Servicio con el botón a.

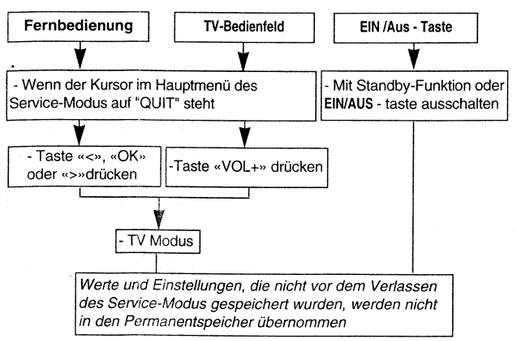
3 EXITING FROM SERVICE MODE



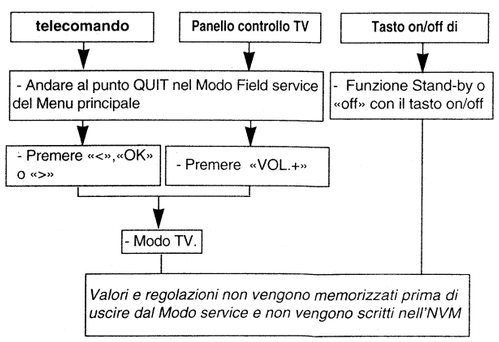
3 SORTIE DEFINITIVE DU MODE SERVICE



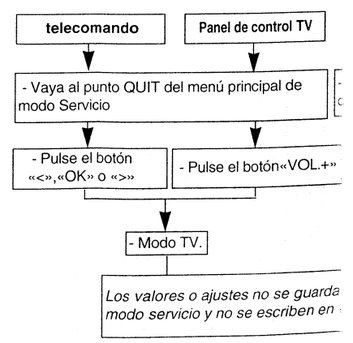
3 ENDGÜLTIGES VERLASSEN DES SERVICE MODE



3 USCIRE DAL SERVICE MODE



3 SALIDA DEL MODO SERVICIO



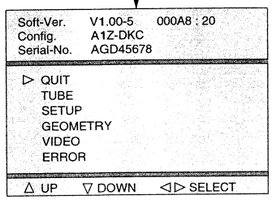
MODO SERVICIO (E)

ODO SERVICIO

1 ACCESO AL MODO SERVICIO

Acceso panel control TV

- Apague la TV con el botón MARCHA:PARADA.
- Pulse los botones **PR -** y **VOL -** y sin soltarlos,pulsar la tecla MARCHA:PARADA.
- Libere los botones **PR -** y **VOL -** .



Nota :

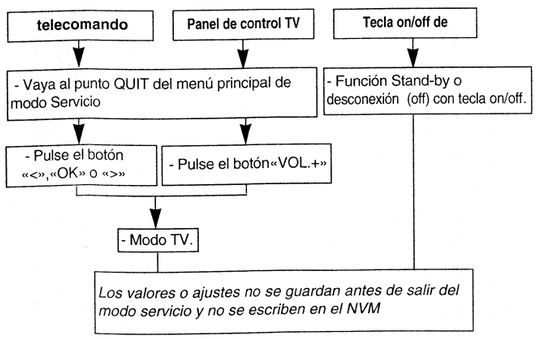
En modo servicio:
- Se ignora la función de bloqueo y se inicializa la función "cerradura ninos".
- Anula todos las horas programadas
- La patilla 8 del SCART es ignorada
- La detección WSS AV Link, EPG, y Telexto son desactivados.
- El apagado automático en caso de ausencia de señal de antena es desactivado.
- El contraste,color y brillo son puestos a los valores de fábrica.
- la nitidez es puesta al punto medio.
- La expansión de contrast al nivel bajo
- Modo Instalación es desactivado.
- Zoom y formato ignorados.

2 SALIDA TEMPORAL DEL MODO SERVICIO

- Pulse Salir en el mando a distancia
- Con el botón Menu puede acceder al menú de uso cotidiano.

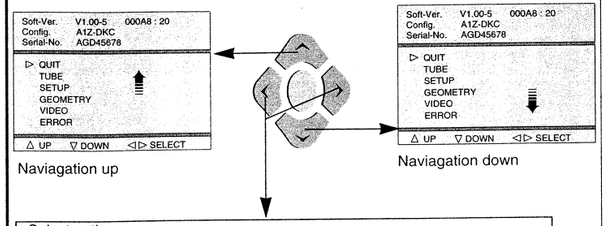
- Puede entrar al Menú Servicio con el botón azul.

3 SALIDA DEL MODO SERVICIO



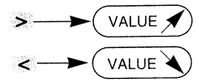
II - NAVIGATION INSIDE THE SERVICE MODE - DEPLACEMENT DANS LE MODE SERVICE SUCHE IN SERVICE MODE - OPZIONI NEL SERVICE MODE - BUSQUEDA EN MODO SERVICIO

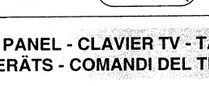
1 REMOTE CONTROL - TELECOMMANDE - FERNBEDIENUNG TELECOMANDO - MANDO A DISTANCIA



- Select option
- Option anwählen
- Selezionare l'opzione
- Seleccionar opción

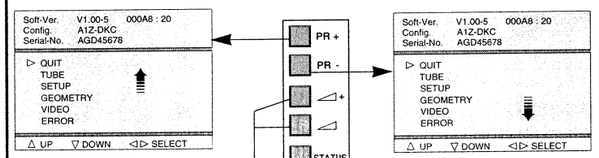
- "Change" value
- Wert "ändern"
- "Cambiare" valore
- "Cambiar" valor



VALUE


VALUE

2 TV CONTROL PANEL - CLAVIER TV - TASTATUR DES FERNSEHGERÄTS - COMANDI DEL TELEVISORE -



- Select option
- Option anwählen
- Selezionare l'opzione
- Seleccionar opción

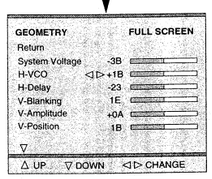
- "Change" value
- Wert "ändern"
- "Cambiare" valore
- "Cambiar" valor

Vol. + → VALUE

Vol. − → VALUE

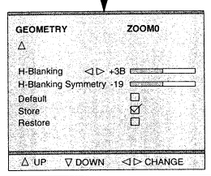
Changing page - Changement de page Seitenwechsel - Cambiare Pagina - Cambio de página

End of page
Fin de page
Am Seitenende
Fine della pagina
Fin de página



« ▽ »
Indicates a following page
Signifie qu'une page suit.
Bedeutet, daß eine Seite folgt
Indica una pagina seguente
Indica una página siguiente

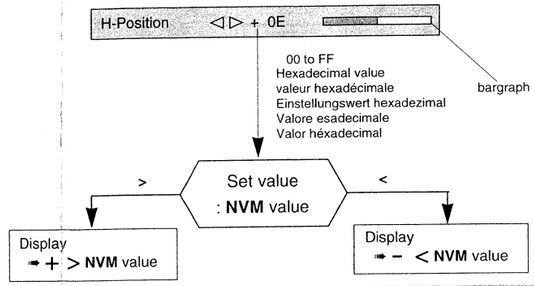
Beginning of Page
Début de page
Am Seitenanfang
Inzio della pagina
Comienzo de página



« △ »
Indicates a preceding page
Signifie qu'une page précède.
Bedeutet, daß eine Seite vorangeht
Indica una pagina precedente
Indica una página precedente

- The menu turns the page when the cursor reaches the arrow.
- Amener le curseur sur la ligne repérée par « ▽ »ou « △ » pour passer à la page qui précède ou qui suit.
- Cursor nach « ▽ »,« △ » zum Seitenwechsel
- Il cursor su « ▽ »,« △ » cambia pagina.
- Cursor en « ▽ » ,« △ » cambia las páginas

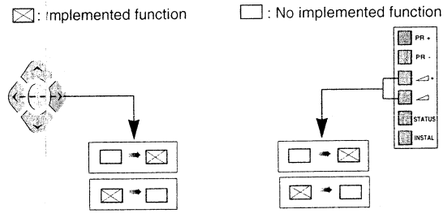
3 DISPLAYING THE VALUE OF THE SETTING - AFFICHAGE DES VALEURS - ANZEIGE DES EINSTELLUNGSWERTS VISUALIZZAZIONE DEL VALORE DELLA REGOLAZIONE - VISUALIZACION DEL VALOR DE AJUSTE



4 TOGGLE FUNCTIONS - VALIDATION DES FONCTIONS EIN-UND AUSSCHALT FUNKTIONEN - FUNZIONI DI COMMUTAZIONE - FUNCION CONMUTACION

To enable a function check (tick) ☒ the box.
Pour valider une fonction cocher ☒ la case correspondante
Zum Implementieren einer Funktion das Kontrollkästchen ☒ aktivieren (ankreuzen)
Per implementare una funzione di verifica, (vistare) ☒ la casella
Para poner en fucionamiento una función verifique (señale) ☒ la casilla

☒: implemented function ☐ : No implemented function



5 STORING VALUES IN MEMORY - MEMORISATION DES VALEURS - SPEICHERN DER WERTE - MEMORIZZAEZ I VALORI - VALORES ALMACENADOS EN LA MEMORIA

After setting, the values are stored in NVM.
Après réglages les valeurs sont mémorisées en NVM.
Nach dem Einstellen werden die Werte im NVM gespeichert.
Dopo la regolazione i valori vengono memorizzati in NVM.
Después del ajuste, los valores son almacenados en NVM

The box ☐ becomes ☒
During alignment, values are temporarily stored in RAM.
En cours d'alignement les valeurs sont mémorisées temporairement en RAM
Während des Abgleichs werden die Werte vorübergehend im RAM gespeichert
Durante l'allineamento i valori vengono memorizzati provvisoriamente sulla RAM
Durante el alineamento, los valores son almacenados temporalmente en RAM

Store ➡ Copies RAM values into NVM
Copie la valeur RAM en NVM
Kopieren des Werts von RAM nach NVM
Copiare i valori RAM in NVM
Copiar valores RAM en NVM

Restore ➡ Copies all values from NVM into RAM.
Copie toutes les valeurs des données NVM en RAM
Kopiert alle NVM-datenwerte in den RAM
Copiare tutti i valori da NVM sulla RAM
Copia todos los valores de NVM a RAM

ROM Default ➡ All the default values of a page in use are stored in RAM.
L'ensemble des valeurs par défaut d'une page courante est chargé en RAM.
Sämtliche Standardwerte der aktuellen Seite werden im RAM geladen
Tutti i valori di default di una pagina in uso vengono memorizzati sulla RAM
Todos los valores por defecto de la página en curso están almacenados en RAM.

III - LITE-MENU FOR FIELD SERVICE MODE - MENUS DU MODE SERVICE

1 MAIN MENU - MENU PRINCIPAL

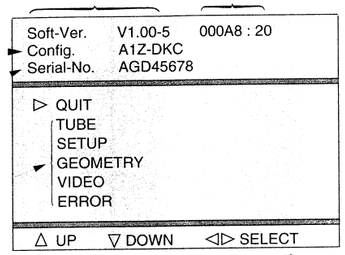
Software Version
Version software
Software Version
Versione software
Versión software

Counter
Compteur
Zähler
Contatore
Contador

Receiver composition
Composition du Récepteur
Aufbau des Empfängers
Composizione del ricevitore
Composición del Receptor

Serial Number
N° de série
Serien-Nr.
Numero seriale
N° Serie

Alignment
Alignement
Abgleich
Regolazione
Alineacion



Navigation inside the Service Mode
Navigation dans le Service Mode
Suche im Service Mode
Opzioni del Service Mode
Búsqueda en el Modo Servicio

TV CONFIGURATION - CONFIGURATION DU TV - GERÄTEKONFIGURATION - CONFIGURAZIONE DEL TV - CONFIGURACIÓN Y TV

Config.	A1Z-DKC

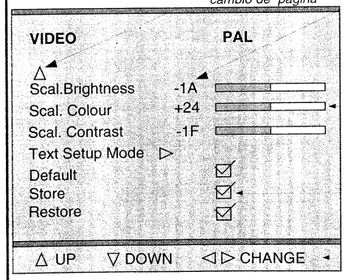
Character 1 : Tube type : «A»= 4/3 , «W» =16/9
Character 2 : Chassis type : «5» = 50Hz, «1»= 100 Hz
Character 3 : Zoom available : «Z»=yes, «-»=not
Character 4 : Ambiant Sensor : «S»= detected, «-»= not
Character 5 : Dolby : «D»=detected, «-»= not
Character 6 : AV Link detected : «K»=IR link detected, «-»= not
Character 7 : Password mode: «C»= Password stored, «-»= not

TIME COUNTER - COMPTEUR DE TEMPS - ZÄHLER - CONTATORE - CONTADOR
The counter indicates the TV's number of service hours.It counts from to 0 to 65535 hours.
The display is hexadecimal.
Le compteur de temps indique le nombre d'heures de service du TV. Il compte de 0 à 65535 heures. L'affichage est en hexadécimal.
Der Zähler zeigt an, wieviele Stunden der Fernseher in Betrieb ist. Die Anzeige ist hexadezimal.
Il contatore indica il numero di ore di servizio del TV. Puo' contatore da 0 a 65535. La visualizzazione è esadecimale.
El contador indica el número de horas de servicio de la TV. Cuenta de 0 a 65535 horas. El visualizador es hexadecimal.

2 SUBMENU - SOUS-MENU

Change the page
Changement de page
Seitenwechsel
cambio di pagina
cambio de página

Hexadecimal value
Valeur hexadecimale de reglage
Abgleichwerte hexadezimal
Valore di regolazione esadecimale
Valor del ajuste en hexadecimal

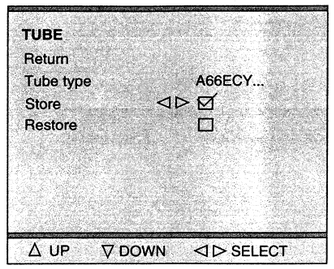


Bargraph
Bargraphe de réglage
Bargraph
Barre grafica di regolazione
Barra gráfica del ajuste

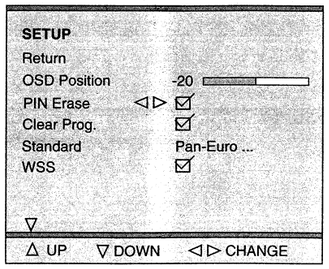
Enable a function
Case de validation - Fonction validée si "cochée"
Zum Implementieren einer Funktion
Per inserire la Funzione
Activar una función

Navigation inside the Service Mode
Navigation dans le Service Mode
Suche im Service Mode
Opzioni del Service Mode
Busquena en el Modo Servicio

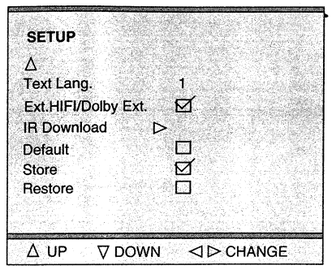
ALIGNMENT PROCEDURE - PROCESSUS DE REGLAGES - ABGLEICH - VISUALIZZAZIONE DEL VALORE DELLA REGOLAZIONE - PROCEDIMIENTO DE ALINEACION



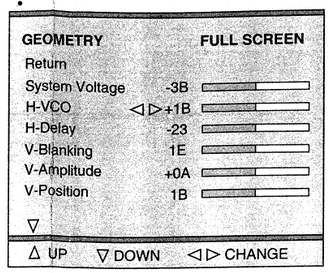
page 1



page 1

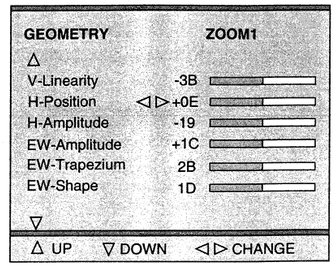


page 2



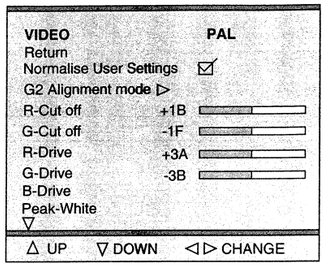
page 1

Test Bar pattern used : 4/3 with geometric circle.



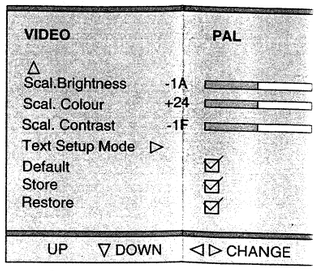
page 2

Adjust separate for 4/3 and 16/9 format. See annexed



page 1

Color standard or RGB is autodetected and displayed opposite the displayed opposite the menu title.



page 2

TUBE

Return
Closes the submenu and the main Field Service Mode menu appears.

Retourne au menu principal.

Verlassen des Untermenüs

Chiude il sottomenu e fa apparire il menu principale Field Service Mode.

Cierra el submenú. El menú Field Service Mode aparece.

Press </>: remote control; Vol. +/- : TV keyb.

Tube type

Define the right tube after changing the NVM. 6 characters
New type tube values (with default video and geometry) are immediatly active
Variable geometry and video parameters are put into NVM when the Store feature is selected. See below tube list.

Definit le tube exact après changement de NVM.
Les nouvelles valeurs de tubes (avec video et géometrie) sont actives de suite.
Les paramètres de vidéo et de géométrie sont chargés en NVM lorsque STORE est sélectionné. Voir liste ci-dessous.

Den Bildröhrentyp auswählen.
Die Geometrie-und Videodefault Werte werden sofort in das NVM geladen.
Bildrohrauflistung : siehe unten.

Definire il tubo appropriato dopo aver cambiato il NVM; 6 caratteri I valori per il nuovo tipo di tubo (con video e forma di default) sono immediatamente attivi. I parametri per video e forma variabili vengono immess i nel NVM quando viene selezionata la funzione Store. Si veda la lista dei tubi riportata sotto.

Definir el tubo correcto después de haber cambiado el NVM.6 caracteres.Los nuevos valores de tipo de tubo (con la vídeo y la geometría por defecto) se activan inmediatamente. Los parámetros variables de geometría y vídeo se graban en el NVM al seleccionar la función Store. Vea más arriba la lista de tubos.

Default tube type :

50Hz A66ECY 13X 15 : A66ECY
4/3 28"MP, AK mask COTY M gun

→ After setting → Store (+) ☑

SETUP

Return
Closes the submenu and the main Field Service Mode menu appears.
Retourne au menu principal.

Verlassen des Untermenüs

Chiude il sottomenu e fa apparire il menu principale Field Service Mode.

Cierra el submenú. El menú Field Service Mode aparece.

Press </>: remote control; Vol. +/- : TV keyb.

OSD Position
Adjusts the position of all Megatext OSD.
Horizontale zentrierung des OSD.

PIN Erase Erases all PINs.
☑ PIN active-Pin aktiv
☐ No PIN active-Kein PIN
Selection : Long press: ≈ 5s
Press </>/OK: remote control;Vol. +/- :TV keyb.
Löschen des PIN Code durch längeres (≈ 5s) drücken der Taste >oder<.
Automatically stored

Clear Prog.
Clears all programms stored in the memory.
Analogues values SOUND PICTURE : factory values.
Return the TV to "out of factory mode.
Selection : Long press:2,5s

Efface tous les programmes mémorisés.
valeurs SON et IMAGES: valeurs usines.
Pour sortir des valeurs usine :
Selection : Long press:2,5s

Setzt das Gerät in die Werksgrundeinstellungen.
Es erscheint nach dem erneuten.
Einschalten das Installationsmenü.

Clear Prog.
Cancella tutti i programmi in memoria.Valori analogici SUONO IMMAGINE:valori di fabbrica.
Riportare la TV al modo Selezione: pressione prolungata: 2,5 sec.

Programa de borrado.
Borra todos los programas almacenados en la memoria.Valores análogos de SOUND PICTURE: valores de fábrica.Regreso a la TV para "salir del modo fábrica".Selección: Presión larga igual a 2,5 s.

☑ active-aktiv ☐ No active-inaktiv

Standard "Pan-Euro" or "I".
BG PAL SECAM,L SECAM (France),
DKK' SECAM,NTSC M,I PAL (UK/IRELAND)

WSS Detection "auto-surround" and "format" via Teletext line 23.
Selection of WSS Processing is valid for all programs.
Sélection du process WSS valid pour tous programmes

WSS (nur bei 16:9 oder Dolby)
Auswertung der Zeile 23 zur automatishen Format-umschaltung und Dolby-umschaltung

Rivelazione "auto-surround" e "format" via televideo alla riga 23.La selezione di WSS Processing vale per tutti programmi.
La selezione di WSS Processing vale per tutti programmi.

Detección "auto-surround" y "format" a través de la línea 23 de Teletext.La selección del procesamiento WSS es válida para todos los programas.La selección del procesamiento WSS es válida para todos los programas.

☑ detect.enable- aktiv ☐ disable-inaktiv

TUBE NAME	LIST	DESCRIPTION	tube type
A66ECY 13X 15	A66ECY	4/3 28" MP, AK mask COTY M gun	00, 50Hz
A59EGD048X300	A59EGD	4/3 25" SF , invar , vector gun , BSVM	03, 50Hz
A68EGD038X300	A68EGD	4/3 29" SF , invar , vector gun , BSVM	04, 50Hz
W66EGV023X115	W66EGV	16/9 28"SF, invar , vector gun , BSVM	06, 50Hz
W76EGX023X115	W76EGX	16/9 32"SF, invar , vector gun , BSVM	07, 50Hz

SETUP

Text. Lang. Teletext language :

0	1	2	3
English	Polish	English(US)	English
German	German	German	German
Swedish	Swedish	Swedish	Swedish
Italian	Italian	Italian	Italian
French	French	French	French
Portug.	Serbocroat	Portug.	Portug.
Czech/Slov.	Czech/Slov.	Czech/Slov.	Turkish.
-	Rumanian	English(UK).	-

EXT.HIFI / Dolby Ext.

Dolby Internal Not available on Normal Sound TV's
Nur bei Dolby TV.
☑ Dolby with External Loudspeaker.
Dolby mit ext.Lautsprechern
☐ Dolby with Internal Loudspeakers.
Dolby mit int. Lautsprechern

External HIFI Not available on Dolby TV's
Bei nicht Dolby TV
☑ External HIFI control
Einstellung der Lautstärke int.Lautsprecher
☐ Normal sound control
Einstellung der Lautstärke der Cinchbuchsen (HIFI Anlage)

IR Download

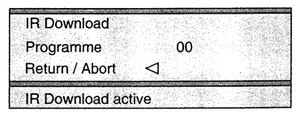
Download screen for receiving mapping via IR data.

Ecran de chargement pour réception "mapping" via IR data

Herunterladen des Programmschemas per IR.

Trasferimento IR
Trasferire schermo per ricezione mappatura via dati IR

Descarga de IR
Pantalla de descarga para recibir el mapeado a través de los datos IR.



"programme 00" : function is active or finished.
Return / Abort : To exit/Abort the menu press "left" arrow key or Volume - key of keyboard.

All other IR commands have no response.

Toutes les autres commandes IR sont sans réponse;

Es gibt auf IR Kommandos keine Reaktion.

Tutti gli altri comandi IR sono senza risposta

Los otros comandos IR no envían respuesta.

→ After setting → Store (+) ☑

GEOMETRY

Return
Closes the submenu and the main Field Service Mode menu appears.
Retourne au menu principal.

Verlassen des Untermenüs
Chiude il sottomenu e fa apparire il menu principale Field Service Mode.
Cierra el submenú. El menú Field Service Mode aparece.
Press </>: remote control; Vol. +/- : TV keyb.

System Voltage
Adjustment of the system voltage Usys.
Only possible via the local keyboard Vol +/- .
Einstellung nur über die Bordbedienung möglich (Lautstärke +/-)

TUBE NAME	DESCRIPTION	Usys
A66ECY 13X 15	4/3 28" MP	132V +/- 0.5V
A59EGD048X300	4/3 25" SF	131V +/- 0.5V
A68EGD038X300	4/3 29" SF	131V +/- 0.5V
W66EGV023X115	16/9 28"SF	137V +/- 0.5V
W76EGX023X115	16/9 32"SF	137V +/- 0.5V

H-VCO Horizontal - VCO oscillator.

Adjust H_VCO until the speed of the unsynchronised picture gets the slowest.

Agir sur H-VCO pour obtenir une image la plus proche de la synchronisation

Den H-VCO auf Schwebung einstellen.

Regolare l'H_VCO finché l'immagine non sincronizzata non avrà raggiunto la velocità minima.

Ajuste H_VCO hasta que la imagen no sincronizada alcance su velocidad más baja.
default value = 0FH
Press </>: remote control; Vol. +/- : TV keyb.

H-Delay		Horizontal delay Use "+" and "-" to adapt the image

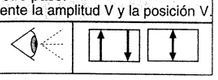
V-Blanking
1-V-amp. pre-align: > 7% overscan
2- Reduce V-blanking: visible on top & bottom
3-Increase step/step:blank. at the bottom and cut- off lines at the top disappear
4- Increase one more step
5- Fine adjust V-amp. and V-position

1-V-amp. ampl.vertic. suffisante (>7% overscan)
2- réduire V-blanking:visible en haut et bas.
3-Agir étape par étape jusqu'à disparition du blanking en bas d'image et des lignes de cut-off en haut d'écran
4- Augmenter d'une valeur.
5- Faire un réglage fin de V-amp. et V-position

1-V-Position und V-Amplitude optimal einstellen (V-amp. vorabgleich: >7% Überschreibung.)
2- V-Blank soweit verändern, daß am oberen und unterem Bildrand gerade eine Austastung sichtbar wird.
3-Den Wert von-Blank um 2 steps erhöhen (2 x die + Taste drücken).

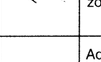
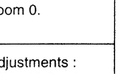
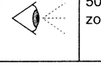
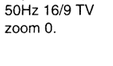
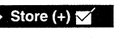
1- Ampiezza verticale: grande a sufficienza (7% di sovrascanzioni)
2- Riduzione della soppressione verticale: visibile in alto e in basso
3- Aumentare passo/passo: vuoto in basso per veder scomparire le linee di interdizione in alto
4- Aumentare ancora di un passo
5- Regolare con precisione l'ampiezza e la posizione verticali

1- Amplitud V: suficientemente grande (7% de sobreexploración)
2- Reducir el parpadeo V: visible en las partes superior e inferior.
3- Aumentar el paso a paso: el vacío en la parte inferior y las líneas de corte en la parte superior desaparecen.
4- Aumentar de otro paso.
5- Ajustar finamente la amplitud V y la posición V.

V-Amplitude V-Position		

→ After setting → Store (+) ☑

GEOMETRY

V-Linearity		
H-Position		
H-Amplitude		
EW - Amplitude		
EW - Trapezium		
EW -Shape		

GEOMETRY ZOOM0

△
H-Blanking ◁▷ +3B
H-Blanking Symmetry -19
Default ☐
Store ☑
Restore ☐
△ UP ▽ DOWN ◁▷ CHANGE

page 3

GEOMETRY

H-Blanking		Adjustments : 50Hz 16/9 TV zoom 0.
H-Blanking Symmetry		Adjustments : 50Hz 16/9 TV zoom 0.

→ After setting → Store (+) ☑

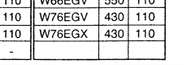
VIDEO PAL

Return
Closes the submenu and the main Field Service Mode menu appears.
Retourne au menu principal.

Verlassen des Untermenüs
Chiude il sottomenu e fa apparire il menu principale Field Service Mode.
Cierra el submenú. El menú Field Service Mode aparece.
Press </>: remote control; Vol. +/- : TV keyb.

Normalise User Settings
Recalls the factory settings for colour, brightness, contrast and sharpness and sets contrast expand to "low".
☑ Factory settings recalled
☐ User settings kept.

G2 Alignment
Display a special menu:
Adjust R-Cut off and G-Cut off to 80H temporary.



RGB cutoff counters

Adjust the lowest value with SCREEN potentiometer to: see table

Es erscheint folgendes Menu. Die R-und G-Cut off Werte für diese Einstellung temporär auf 80H einstellen. den kleinsten angezeigten Wert mit dem Schrmgitterensteller auf entsprechenden. wert in der Tabelle abgleichen.

Tube Type	Value	Tube Type	Value
A66EGW	60H	W76EGX	60H
A59EGD	50H	A80EDM	60H
A68EGD	50H	A90AFF	50H
W66EGV	50H	RP 4 / 3	-
W76EGV	60H	RP 16 / 9	60H

To return video submenu:
Press </>/OK: remote control;Vol. +/- :TV keyb.
Select"Restore" to restore the cut off values.

R-Cut off*		☼+◑+◑=nom. Grey scale test pattern white =100%
G-Cut off*		
R - Drive		☼+◑+◑=nom. Grey scale test pattern white =100%
G - Drive		
B - Drive		
Peak-White**		☼+◑+◑=nom. Peek white test pattern white =100%

CRT Pin 6,8,11

Blue cathode Blue cathode

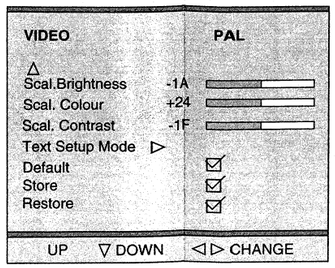
Tube Type	[init]	[Vpp]	Tube Type	[init]	[Vpp]
A59EGD	470	110	A90AFF	-	-
A66ECY	350	110	W66EGV	550	110
A66EGW	425	110	W76EGV	430	110
A68EGD	400	110	W76EGX	430	110
A80EDM	-	-			

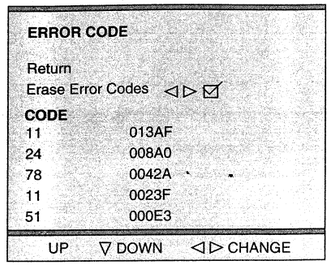
VIDEO PAL

Scal. Brightness		☼+◑ = 50% ◑ = 100% Grey scale test patte white =100% black
Scal*. Colour		☼+◑+◑ =nom. PAL (then SECAM +RGB) 75% Colour bar test pattern v RF. Blue Cathode CRT F-H
Scal. Contrast		factory settings.
Text Set-up Mode		☼+◑+◑ =nom. Set Text Contr. to max. ! Adjust Text Gain to get a ligh output of just ≥40% of OMA peak withe. Fine-adjust with Text Contr. t 40% of light output of OMA Peak White. Return ◂ Text Contr. D4 Text Gain A8 V CRT Pin 6,8,11

Note :
* adjust separate for PAL/NTSC/SECAM and RG getrennte Einstellung für PAL/SEACAM und RG
* * After PEAK white adjustment control cut off set Repeat the adjustments if necessary.
nach der Einstellung von Peak white die Cut of Einstellungen wiederholen

→ After setting → Store (+) ☑





displayed opposite the displayed opposite the menu title.

VIDEO		PAL
Scal. Brightness		+ = 50% = 100% Grey scale test pattern white =100% black
Scal*. Colour		+++ =nom. PAL (then SECAM +RGB) 75% Colour bar test pattern via RF. Blue Cathode CRT F-H
Scal. Contrast	factory settings.	
Text Set-up Mode		+++ =nom. Set Text Contr. to max. ! Adjust Text Gain to get a light output of just ≥40% of OMA peak withe. Fine-adjust with Text Contr. to 40% of light output of OMA Peak White. Return Text Contr. D4 Text Gain A8 V CRT Pin 6,8,11

Note :

* adjust separate for PAL/NTSC/SECAM and RGB/AV getrennte Einstellung für PAL/SEACAM und RGB/AV

* * After PEAK white adjustment control cut off setting. Repeat the adjustments if necessary. nach der Einstellung von Peak white die Cut off Einstellungen wiederholen

→ After setting → Store (+)

ERROR CODE	
Return	Closes the submenu and the main Field Service Mode menu appears. Retourne au menu principal. Verlassen des Untermenüs Chiude il sottomenu e fa apparire il menu principale Field Service Mode. Cierra el submenú. El menú Field Service Mode aparece. Press </>: remote control; Vol. +/- : TV keyb.
Erase Error Codes	Clears all error codes storedin the NVM.Long press action (2.5s) : Durch längeres Drücken der >oder< Taste werden die Error Codes gelöscht. Press </>/OK: remote control;Vol. +/- :TV keyb.
CODE	LED Error Codes

Store the last five different error codes when each occured (via runtime counter) .The more recent error is displayed on top.A repeat of the error code on the top of the list just updates the runtime. 27 different error codes are signalled from the TV LED :11 to 44.
The error code is signalled as two separate digits with a suitable pause in-between and will repeat until the TV is fixed or fixes itself.

e.g. Error-code : 23 will be displayed :
2 flashes, short pause
3 flashes, long pause .....
List of Errors Codes : see table

Mémorise les cinq derniers codes erreurs et affiche en haut d'écran les plus récents.
27 codes erreurs différents sont signalés par 2 digits selon une séquence spécifique
Exemple :
Code erreur : 23 affiché
2 flashes, courte pause
3 flashes : longue pause
.....
Voir ci-contre la liste des codes erreurs

Zeigt die letzen 5 Fehlercodes mit der Laufzeit an. Der zuletzt aufgetretene Fehler steht an erster Stelle.
Sollte ein Fehler wiederholt auftreten wird nur die Laufzeit aktualisiert.
Die Fehlercodes können im Menü Error Code angezeigt werden oder über die Kontroll LED angezeigt werden;

Beispiel für die Anzeige über die Kontroll LED :

Fehlercode 23
Zweimaliges Blinken der LED, kurze Pause
Dreimaliges Blinken der LED, lange Pause.
Auflistung der Fehlercodes : siehe Liste

Memorizzare gli ultimi cinque codici d'errore (differenti tra loro) dopoche ognuno di essi si sarà presentato (attraverso il contatore della durata di esecuzione). L'errore più recente viene visualizzato in cima. La ripetizione del codice di errore in cima alla lista non farà altro che aggiornare la durata di esecuzione.Dal LED della TV vengono segnalati 27 codici d'errore differenti, numerati da 11a 44. Il codice d'errore è indicato da due cifre separate da un opportuno intervallo di tempo e verrà ripetuto fino a quando il televisore non sarà stato riparato o non si sarà corretto da solo. Ad es:
Il codice d'errore 23 visualizzerà:
2 segnali luminosi con pausa breve
3 segnali luminosi con pausa lunga
Per la lista dei Codici d'Errore, si veda la tabella

Almacene los últimos cinco códigos de error cuando cada uno ocurre (gracias al contador de tiempo de ejecución). El error más reciente se visualiza en la parte superior. Una repetición del código de error en la parte superior de la lista solamente actualiza el tiempo de ejecución El indicador TV LED indica 27 códigos de error diferentes: de 11 a 44. El código de error se señala en forma de dos dígitos separados con una pausa apropiada entre los dos y se repetirá hasta que repare el TV o él se repara a sí mismo
Por ejemplo,Se va visualizar el código de error 23:
2 parpadeos, una pausa corta;
3 parpadeos, una pausa larga.
Para la Lista de códigos de error, consulte la tabla.

ERROR CODES

GB

11 1st Audio_MSP doesn't answer
12 2nd Audio-MSP doesn't answer
13 Audio-DSP doesn't answer
14 Video IC STV2161/2 doesn't answer
15 Chroma IC 2151/9143 doesn't answer
16 Upconverter DMU0 doesn't answer
17 Audio (or Dolby) module not detected
18 SCART IC TEA6415C doesn't answer
19 Tuner CTT5000 doesn't answer
21 I2C Bus1 data line held low
22 I2C Bus2 data line held low
23 I2C Bus1 clock line held low
24 I2C Bus2 clock line held low
25 Switched 5V not available
26 Tube doesn't gets warm in time
27 Deflection detects >3 times protection (problem detected on "breathing" line)
29 DRAM memory of Megatext defect
33 The PSI chip (STV2165) doesn't answer
34 The NVM (X24C32) chip doesnt answer
35 13V not available
37 Unexpected level on NMI (Interrupt) line found (possible cause : tube flashover)
38 M3LBus for Megatext is blocked
39 Megatext (SDA5273) doesn't answer
41 bus1 (data line) not recoverable
42 bus2 (data line) not recoverable
43 MCU (Motion Mastering Up-Converter) doesn't answer
44 Convergence IC (Rear Projector) doesn't answer

F

11 Processeur Audio MSP ne répond plus
12 Deuxième MSP ne répond plus (Dolby)
13 Audio-DSP ne répond plus (produit Dolby)
14 Video-IC STV2161 ou 2162 ne répond plus
15 Chroma-IC STV2151 ou TDA9143 ne répond plus
16 Convertisseur de frequence d'image digital DMU0 (Intelligent Mastering) ne répond plus
17 Module son (ou Dolby) n'est pas détecté
18 Commutateur SCART TEA6415C ne répond plus
19 Tuner CTT5000 ne répond plus
21 I2C-bus 1 data bloqué au niveau bas
22 I2C-bus 1 clock bloqué au niveau bas
23 I2C-bus 2 data bloqué au niveau bas
24 I2C-bus 2 clock bloqué au niveau bas
25 Le "5V commuté" n'est pas disponible
26 Tube ne chauffe pas a temps
27 Plus que 3-fois la déflection a détecté une "protection" (c'est-a-dire qu'il y a un problème détecté sur la ligne "breathing")
29 Mémoire (DRAM) du Megatext est en panne
33 STV 2165 (PSI 100Hz) ne répond plus
34 NVM (mémoire) X24C32 ne répond plus
35 +13V n'est pas disponible
37 Problème détecté sur la ligne "Interrupt" pendant le démarrage ou le fonctionnement duTV. Possibilité: "arking"?
38 Bus M3L pour Megatext est bloqué
39 Megatext (SDA5273) ne répond plus
41 I2C-bus 1 data reste blocqué
42 I2C-bus 2 data reste blocqué
43 MCU (convertisseur de frequence d'image digital: Motion Mastering) ne répond plus
44 CI Convergence ne répond plus (rétroprojecteur)

D

11 Audio MSP Prozessor antwortet nicht.
12 Zweiter Audio MSP Prozessor antwortet nicht.(Dolby)
13 Audio DSP Prozessor antwortet nicht. (Dolby)
14 IC STV2161/62 antwortet nicht
15 IC STV2151 / TDA9143 antwortet nicht
16 DMU0 Upconverter (Videomodul) antwortet nicht
17 Audio- oder Dolby-modul nicht erkannt
18 TEA6415C antwortet nicht (SCART Schalter)
19 Tuner CTT5000 antwortet nicht
21 I2C Bus1 data line ist auf low
22 I2C Bus2 data line ist auf low
23 I2C Bus1 clock line ist auf low
24 I2C Bus2 clock line ist auf low
25 Geschaltete 5V nicht vorhanden
26 Röhre wird nicht rechtzeitig warm
27 Ablenkung meldet 3 mal Fehler. (Problem auf Breathing Leitung)
29 DRAM des Megatext defekt
33 STV 2165 (PSI 100Hz) antwortet nicht
34 NVM Chip antwortet nicht (X24C32)
35 +13V nicht vorhanden
37 Unerwarteten Zustand an NMI (Interrupt) line gefunden. (Mögliche Urasache = Röhren Überschlag")
38 M3L Bus des Megatext blockiert
39 Megatext (SDA 5273) antwortet nicht
41 Bus1 (data line) nicht möglich zu reaktivieren
42 Bus2 (data line) nicht möglich zu reaktivieren
43 MCU (Motion Mastering Up-Converter) antwortet nicht
44 Konvergenz IC antwortet nicht (Rear-Projektor)

I

11 Primo Audio MSP non risponde piú
12 Secondo Audio MSP non risponde piú
13 Audio DSP non risponde piú
14 2161/2 non risponde piú
15 2151/9143 non risponde piú
16 Il convertitore non risponde piú
17 Modulo Audio non trovato
18 TEA6415C non risponde piú
19 Il sintonizzatore non risponde piú
21 Linea I2C bus dati 1 mantenuta bassa
22 Linea I2C bus dati 2 mantenuta bassa
23 Linea I2C bus temporizzatore 1 mantenuta bassa
24 Linea I2C bus temporizzatore 2 mantenuta bassa
25 Commutazione 5V non disponibile
26 Il tubo non si riscalda in tempo
27 La deflezione ha rilevato piú
29 Difetto alla DRAM di Megatext
33 Il chip PSI non risponde piú
34 Il chip NVM non risponde piú
35 13V non disponibile
37 Livello imprevisto sulla linea NMI
38 Bus M3L per Megatext bloccato
39 Megatext non risponde piú
41 Bus 1 (linea dati) non ripristinabile
42 Bus 2 (linea dati) non ripristinabile
43 MCU non risponde
44 Convergenza IC non risponde

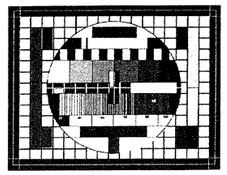
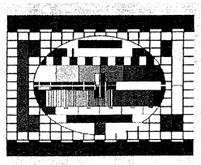
E

11 Procesador de audio MSP no responde
12 Segundo MSP no responde (Dolby)
13 Audio DSP no responde
14 Cir. integrado de video STV2161 ó 2162 no responde
15 Cir. integrado croma ST2151 ó TDA9143 no responde
16 Convertidor de frecuencia de imagen digital DMU0 (Mastering Inteligente) no responde
17 Módulo de sonido (o Dolby) no se detecta
18 Conmutador Scart (TEA6415C) no responde
19 Tuner CTT5000 no responde
21 Data 1 del bus I2C permanece en bajo
22 Clock 1 del bus I2C permanece en bajo
23 Data 2 del bus I2C permanece en bajo
24 Clock 2 del bus I2C permanece en bajo
25 No se dispone de los "5v conmutados"
26 El tubo tarda en calentarse
27 La protección de la deflexión actúa mas de 3 veces (el problema se detecta en la línea de "breathing")
29 La memoria DRAM del Megatext está defectuosa
33 El chip STV2161 (PSI 100Hz) no responde
34 La memoria no volátil X24C32 no responde
35 No están disponibles los + 13 v.
37 Problema detectado en la línea "Interrupt" durante el arranque o el funcionamiento del TV.Posibilidad de chispazos en muy alta?
38 El bus M3L para el Megatext está bloqueado
39 Megatext (SDA5273) no responde
41 Data 1 del bus I2C permanece boqueado
42 Data 2 del bus I2C permanece bloqueado
43 MCU (convertidor de frecuencia de imagen digital: Motion Mastering) no responde
44 Cir. integrado de covergencia no responde (retroproyectores)

GEOMETRY MODE ALIGNMENT - 50Hz VERSION

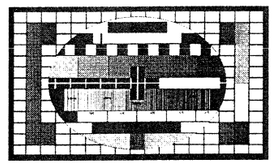
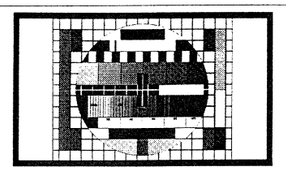
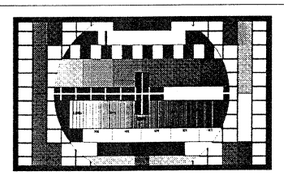
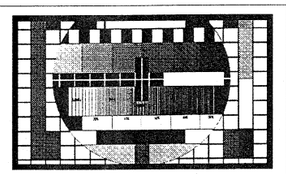
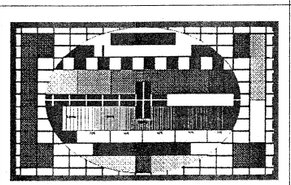
4/3 picture tube

Signal : 4/3 test pattern

4 / 3 standard mode (zoom 0)		**50Hz Version** : overscan V=107% , H=107% 1- Adjust Vertical position and Vertical amplitude 2- Adjust Vertical Blanking and linearity 3- Adjust Horizontal position and Horizontal ampltude 4-Adjust EW Amplitude ,EW Shape and Trapezium
16 / 9 standard mode zoom 0		Adjust the vertical height until it is 80% of the horizontal width.

16/9 picture tube

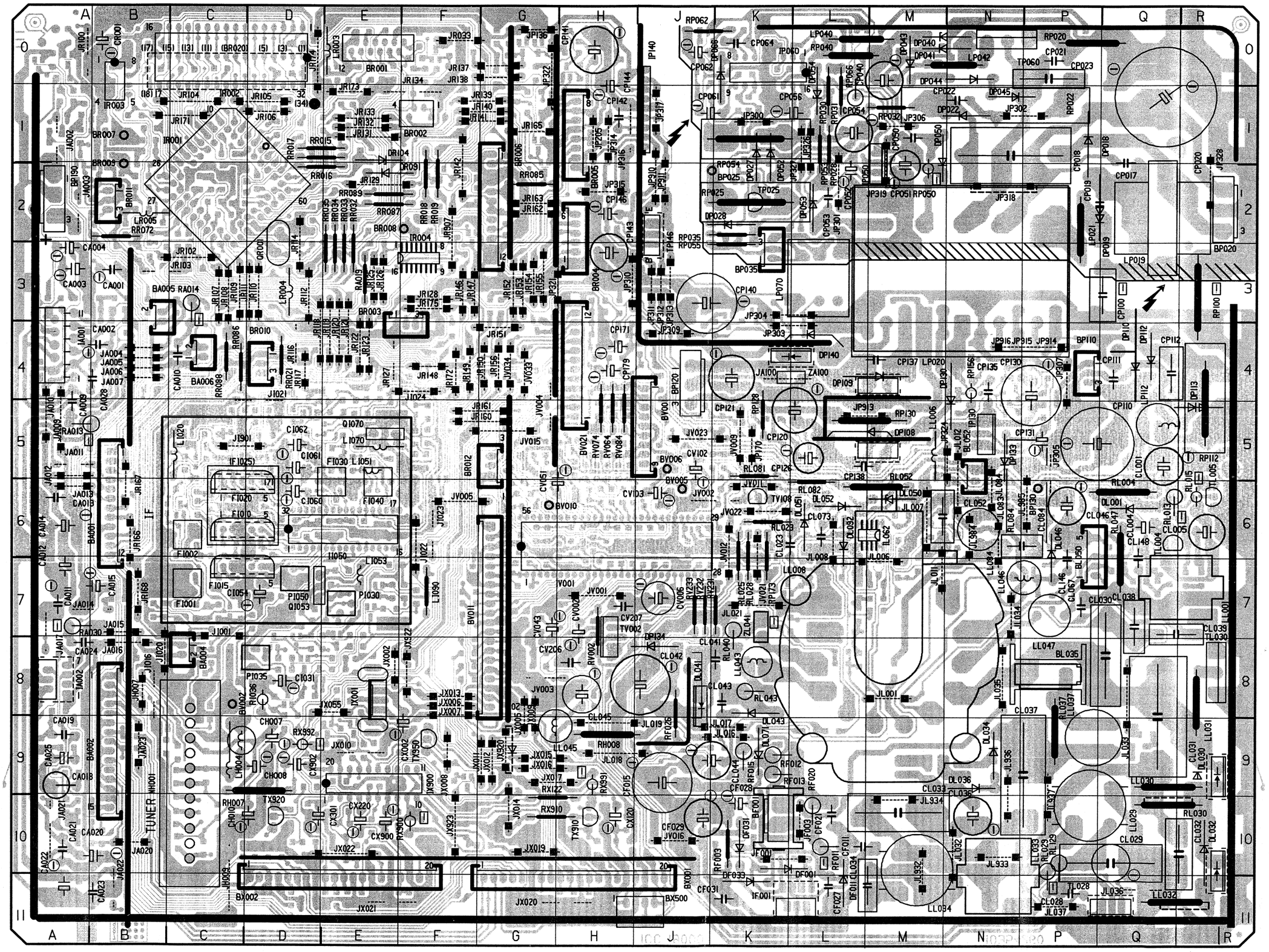
Signal : 4/3 test pattern

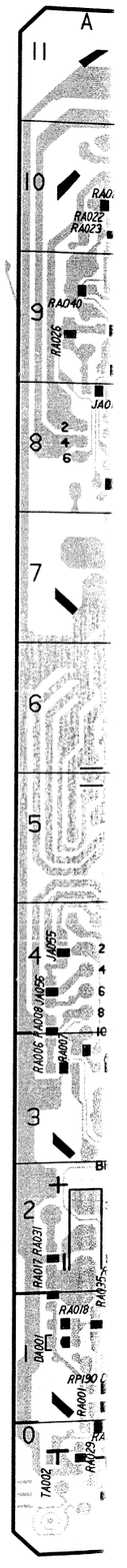
16 / 9 standard mode (zoom 0)		**50Hz Version** : overscan V=107% , H=107% 1- Adjust Vertical position and Vertical amplitude 2- Adjust Vertical Blanking and linearity 3- Adjust Horizontal position and Horizontal ampltude 4-Adjust EW Amplitude ,EW Shape and Trapezium
4/3 Centered (zoom 0)		**50 Hz Version** : overscan V=107% , H=80% of the screen 1- Adjust H-amplitude & H-position 2- Adjust H- Blanking and H-blanking symmetry
< 4/3 > wide (zoom 1)		**50 Hz Version** : overscan V=133% , H=107% 1- Adjust V-amplitude
⇧ 4/3 ⇧ PANNING (zoom 1)		**50 Hz Version** : overscan V=133% , H=107% No adjustment necessary
Full Screen Zoom		**50 Hz Version** : overscan V=114% , H=107% 1- Adjust V-amplitude

MAIN BOARD - PLATINE PRINCIPALE - CHASSIS GRUNDPLATTE - PIASTRA PRINCIPALE - PLATINA PRINCIPAL

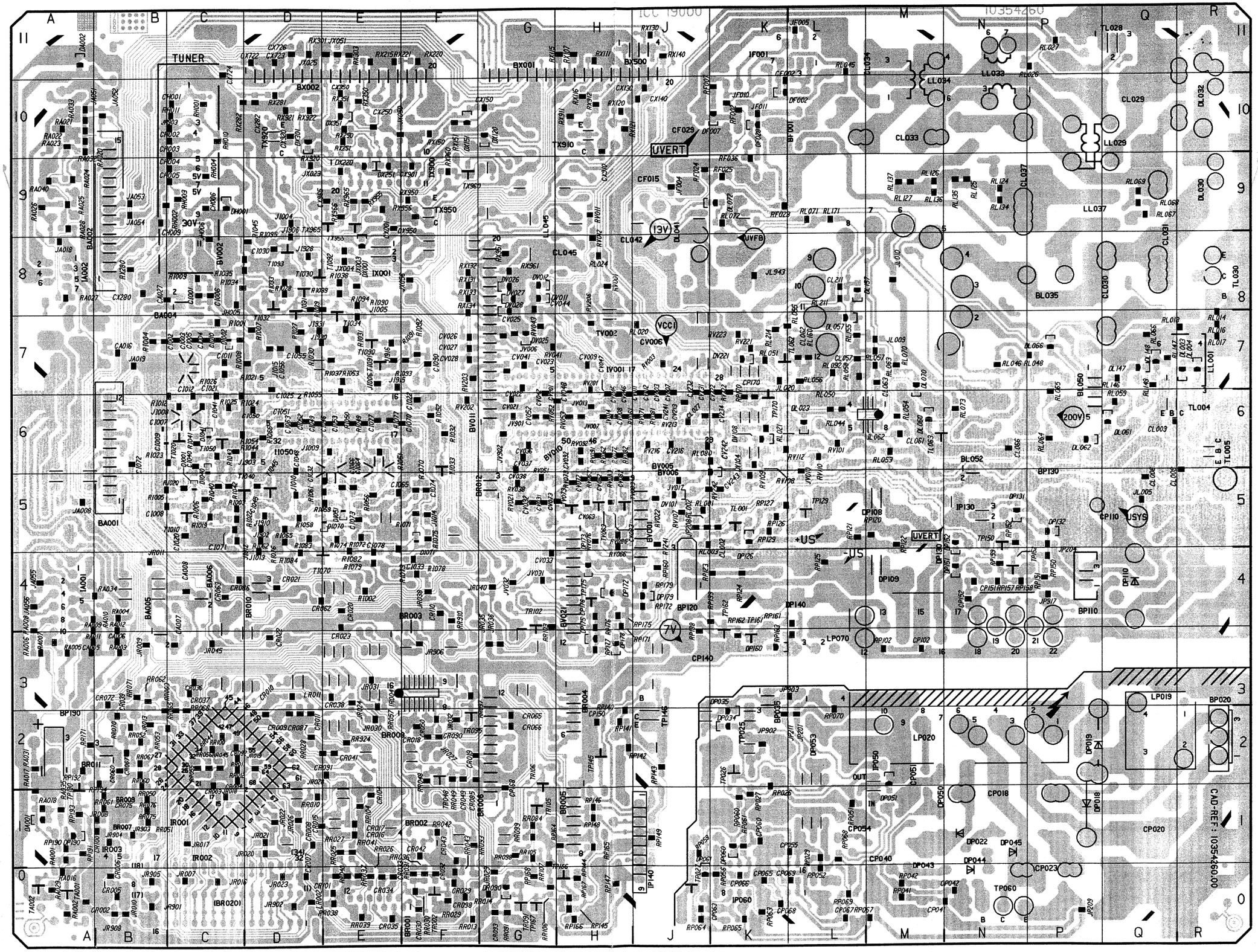
COMPONENT SIDE - COTE COMPOSANTS - BESTÜCKUNGSSEITE - LATO COMPONENTI - LADO COMPONENTES

SOLDER





SOLDER SIDE - CÔTE SOUDURES - LÖTSEITE - LATO SALDATURE - LADO SOLDADURAS



ICC19 50 Hz
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COMPONENTS LOCATION - LOCALISATION DES ELEMENTS - LAGE DER BAUTEILE - LOCALIZZAZIONE DEGLI ELEMENTI - LOCALIZACION DE LOS COMPONENTES

* SOLDER SIDE - COTE CUIVRE - LÖTSEITE - LATO SALDATURE - LADO DEL COBRE

1 2 3

BA001	B6
BA002	B9
BA004	C8
BA005	B3
BA006	C4
BF001	K10
BL035	P8
BL050	P6
BL052	N5
BP020	R2
BP025	J2
BP035	K3
BP110	P4
BP120	J4
BP130	P6
BP190	A2
BR001	E0
BR002	F1
BR003	F4
BR004	H2
BR005	H1
BR006	G2
BR007	B1
BR008	F2
BR009	B2
BR010	D4
BR011	B2
BR012	G5
BV001	J5
BV002	C8
BV005	J6
BV006	J5
BV010	G6
BV011	G7
BV021	H4
BX001	H11
BX002	E11
BX500	J11

CA001	B3
CA002	B4
CA003	A3
CA004	A3
CA005*	B3
CA006*	B3
CA007*	C 3
CA008*	C 4
CA009	A 5
CA010	C 4
CA011	A 7
CA012	A 7
CA013	A 6
CA014	A 6
CA015	B 7
CA016*	B7
CA018	A9
CA019	A9
CA020	B10
CA021	A10
CA022	A11
CA023	B11
CA024	A8
CA025	A9
CA027*	C8
CA028	B4
CF002*	K10
CF011	L10
CF015	J9
CF021	L10
CF027	L11
CF028	K10
CF029	J10
CF031	K11
CH001*	C10
CH002*	C10
CH003*	C10
CH004*	C9
CH005*	C9
CH006*	C9
CH007	D9
CH008	D9
CH009*	B9
CH010	D10
CI001*	C8
CI002*	B7
CI003*	C7
CI004*	C7
CI005*	C7
CI006*	C8
CI007*	B6
CI008*	C5
CI009*	C6
CI010*	C7
CI011*	C7
CI012*	C6
CI020*	C5
CI021*	C6
CI022*	F6
CI025*	D7
CI030*	D8

CI031	D8
CI032*	E5
CI033*	F4
CI040*	C6
CI041*	C6
CI045*	D5
CI046*	E6
CI048*	D6
CI049*	D6
CI050*	D6
CI051*	D6
CI052*	D6
CI053*	E6
CI054	D7
CI055*	D7
CI056*	D7
CI060	D6
CI061	D5
CI062	D5
CI063*	D6
CI064 *	E5
CI065*	E5
CI066*	E5
CI070*	F6
CI071*	C5
CI072*	B6
CI073*	E5
CI074*	F5
CI077*	E6
CI078*	E4
CI090*	F7
CL001	Q5
CL002*	K5
CL003*	Q6
CL004	Q6
CL005	R6
CL006*	Q5
CL008*	R5
CL023	L6
CL027*	J6
CL028	P11
CL029	Q10
CL029	Q10
CL030	Q8
CL031	Q8
CL032	R10
CL033	M10
CL034	M11
CL036	N10
CL037	P9
CL038	Q7
CL039	R7
CL041	K8
CL042	J8
CL043	K8
CL044	K9
CL045	H8
CL046	P6
CL052	M6
CL057*	L7
CL061*	M6
CL062*	L7
CL063*	M7
CL066*	N6
CL067	P7
CL073	L6
CL084	P6
CL146	P6
ICL148	Q6
CL211*	L8
CP017	Q1
CP018	N1
CP019	Q 2
CP020	Q 1
CP020	Q1
CP021	P0
CP022	N1
CP023	P0
CP040	M0
CP041*	N0
CP042*	N0
CP050	M1
CP051	M2
CP052	L2
CP053	L2
CP054	L1
CP055*	L1
CP056	L1
CP060*	K1
CP061	J1
CP062	J0
CP063*	J0
CP064	K0
CP065*	K0
CP066*	K0
CP067*	L0
CP068*	K0
CP069*	L0
CP100	P3
CP100	Q3
CP102*	M3
CP110	P5
CP111	Q4
CP112	Q4
CP120	L5

CP121	K4
CP126	L5
ICP130	P4
CP131	P5
CP135	N4
CP137	M4
CP138	L5
CP140	J3
CP141	H0
CP142	H1
CP143	H 3
CP144	H1
CP146	H2
CP150*	H2
CP151*	N4
CP152*	N4
CP168*	G1
CP170*	K6
CP171	H4
CP176*	H4
CP179	H4
CR001	B0
CR002*	A0
CR003*	C2
CR004*	C2
CR005*	B0
CR006*	B0
CR007*	D0
CR008*	D1
CR009*	D2
CR010*	D2
CR011*	D2
CR015*	D1
CR016*	E1
CR017*	E1
CR018*	F2
CR019*	F2
CR020*	E4
CR021*	D4
CR022*	D3
CR023*	E4
CR029*	F0
CR030*	F0
CR032*	F0
CR033*	E0
CR034*	E0
CR035*	E0
CR036*	C3
CR037*	C3
CR038*	E3
CR039*	B2
CR041*	E2
CR042*	F1
CR043*	F1
CR049*	F2
CR050*	F2
CR060*	B2
CR062*	D4
CR063*	C4
CR065*	G2
CR066*	G2
CR067*	B2
CR072*	B3
CR075*	B1
CR085*	F2
CR086*	C4
CR087*	D2
CR090*	F2
CR091*	E2
CR092*	C2
CR093*	G0
CR098*	F0
CR100*	B1
CR101*	E0
CR104*	E1
CR110*	F4
CV002	H7
CV003	J6
CV006	J7
CV007*	J6
CV008*	H 6
CV009*	H7
CV011*	J6
CV012*	J6
CV021*	G6
CV022*	G7
CV023*	G7
CV025*	G7
CV026*	F7
CV027*	F7
CV028*	F7
CV031*	G5
CV032*	G5
CV033*	G4
CV036*	G6
CV037*	G6
CV038*	G6
CV041*	G7
CV042*	G6
CV043	G7
CV044*	G8
CV046*	H6
CV047*	H6
CV048*	H7
CV051	H6

CV052*	G6
CV062*	H5
CV063*	H5
CV072*	H5
CV073*	H5
CV082*	H5
CV083*	H5
CV092*	H6
CV102	J5
CV103	J6
CV201*	H6
CV206	H8
CV207	H7
CV213*	J6
CV216*	J6
CV222*	K6
CV231*	J6
CV232*	J6
CV234*	K6
CV241*	J6
CV242*	K6
CV243*	K5
CV246*	H6
CX001*	E9
CX002	F9
CX120	H10
CX130*	J10
CX140*	J10
CX150*	G10
CX220	E10
CX250*	E10
CX280*	B8
CX282*	D10
CX301	D10
CX350*	E10
CX722*	D11
CX723*	D11
CX724*	C11
CX726*	D11
CX900	E10
CX901*	F9
CX902	D9
CX910*	H10
CX920*	D10
CX950*	F9
CX965*	E9

DA001*	A1
DA002*	A11
DF001	K10
DF002*	K10
DF007*	K10
DF011	L11
DF028*	K10
DF031	K10
DF033	K11
DH001*	C9
DI001*	C5
DI002*	C 7
DI040*	C6
DI041*	C6
DI051*	E5
DI070*	E5
DI071*	F5
DL001	Q6
DL003*	R7
DL004*	R7
DL023*	L6
DL030*	R9
DL030	R9
DL032*	R10
DL032	R10
DL032	R11
DL034	N9
DL036	N9
DL041*	J8
DL041	J8
DL043	K8
DL046	P6
DL050	M6
DL051	L6
IDL052	L6
DL057*	L7
DL060*	M6
DL061*	Q6
DL062*	P6
DL066*	P7
DL070*	M7
DL071	K9
DL072*	K9
DL092	L6
DL147*	Q7
DL148*	Q7
DL157*	L8
DP018	P1
DP019	Q2
DP022	N1
DP027	K1
DP028	K2
DP034*	K 2
DP035	K2
DP040	N0
DP041	N0

DP043	M0
DP044	N0
DP045	N1
DP050	M1
DP051*	M2
DP052	K1
DP053	L2
DP054	L1
DP060*	K1
DP061*	J0
DP066	K0
DP108	L 5
DP108*	M5
DP108	M4
DP109*	M4
DP109	M4
DP110	Q4
DP112	Q 4
DP113	R5
DP126*	K5
DP130	N4
DP131*	N5
DP132*	P5
DP133	N5
DP134	J8
DP140*	L4
DP140	L4
DP151*	N4
DP152*	N5
DP160*	K3
DP172*	H4
DP173*	H4
DP175*	H3
DP178*	H3
DP179*	J4
DP190*	A1
DR090*	G0
DR091	E2
DR104	E1
DV011*	G8
DV012*	G8
DV025*	G7
DV026*	G8
DV027*	G8
DV028*	G8
DV101*	J5
DV104 *	K5
DV108*	K6
DV221*	K7
DX001*	E8
DX120	G10
DX151*	F10
DX220*	E9
DX251*	E9
DX301*	D10
DX351*	E10

FI001	C7
FI002	C6
FI010	C6
FI015	C7
FI020	C6
FI030	E6
FI040	E6

IA001	A7
IA001	A4
IA001	A8
IA002	A2
IF001	L11
II050	E6
IIL062*	M6
IP050	M1
IP060	K0
IP130	N5
IP140	J2
IP140	J1
IR001*	C2
IR001	C2
IR002*	C0
IR002	C0
IR003	B0
IR004*	F3
IR004	F3
IV001	H6
IX001*	E8
IX001	E8
IX900	E9

JA002	A1
JA003	A2
JA004	B4
JA005	B4
JA006	B4
JA007	B4
JA008	A5
JA009	A5

JA010	A5
JA011	A5
JA012	A5
JA013	A 6
JA014	B7
JA015	B7
JA016	B8
JA017	A7
JA018*	A 8
JA019	B7
IJA020	B10
JA021	A10
JA022	B11
JA023	B9
JA051*	A10
JA052*	B10
JA053*	B9
JA054*	B9
JA055*	A4
JA056*	A4
JA100	K4
JF001	K10
JF003	L10
JF004*	J9
JF005*	L11
JF010*	K10
JF011*	K10
JH005*	C8
JH006*	C8
JH007	B8
JH009	C11
JH903*	C 10
JI001	C7
JI004*	D9
JI005*	E7
JI006*	E7
JI008*	C6
JI009*	E6
JI010*	D5
JI012*	C5
JI013*	D5
JI014*	F5
JI015*	D7
JI016	B8
JI020	B8
JI021	D5
JI022	F6
JI023	F6
JI024	F 4
JI901	C5
JI902*	D5
JI903*	D6
JI906*	D8
JI910*	D5
JI915*	E7
JI916*	E7
JI928*	D8
JI930*	D7
JI931*	D8
JL001	M8
JL005*	Q 5
JL006	M7
JL007	M6
JL008	L6
JL009 *	M7
JL010*	M8
JL011	M7
JL012	N6
JL016	K9
JL017	K9
JL018	H9
JL019	H9
JL020 *	K 7
JL021	K7
JL032	N10
JL033	Q8
JL034	N7
JL035	N8
JL036	Q11
JL037	P11
JL083	N 6
JL084	N6
JL932	M10
JL933	N10
JL934	M10
JL936	N10
JL937	P10
JL943*	K8
JL984	N6
JL985	P6
JP136	G0
JP170	K5
JP201*	L2
JP204*	P5
JP205	H1
JP208*	J5
JP209*	P0
JP211*	K2
JP300	K1
JP301	L2
JP302	P1
JP303	L4
JP304	L3
JP305	P5
JP306	M1

JP307	P4
JP309	J4
JP310	H3
JP311	J3
JP312	J3
JP313	J3
JP314	H1
JP315	H2
JP316	H1
JP317	J1
JP318	N2
JP319	M1
JP321	H3
JP322	G0
JP324	N5
JP326	L1
JP327	L1
JP328	R2
JP902*	K2
JP903*	L3
JP910	J2
JP911	J2
JP913	L5
JP914	P4
JP915	P4
JP916	P4
JP917*	P4
JR007*	C0
JR008*	B1
JR009*	B3
JR017*	C1
JR018*	C1
JR019*	D 2
JR020*	D1
JR021*	D1
JR022*	D1
JR023*	D0
JR024*	E3
JR026*	D1
JR027*	F2
JR028*	E2
JR029*	G0
JR030*	E2
JR031*	E3
JR032*	F2
JR033	F0
JR035*	G3
JR036*	G3
JR038*	F4
JR040*	G4
JR045*	C3
JR100	A0
JR102	C3
JR103	B3
JR104	C1
JR105	D1
JR106	D1
JR107	C3
JR108	C3
JR109	C3
JR110	D3
JR111	D3
JR112	D3
JR114	D3
JR116	D4
JR117	D4
JR118	D4
JR119	E4
JR120	E4
JR121	E4
JR122	E4
JR123	E4
JR125	E3
JR126	E3
JR127	E4
JR128	F3
JR129	E2
JR131	E1
JR132	E1
JR133	E1
JR134	F1
JR137	G0
JR138	G0
JR139	G1
JR140	G1
JR141	G1
JR142	F2
JR146	F3
JR147	F3
JR148	F4
JR149	F4
JR150	G4
JR151	G4
JR152	G3
JR153	G3
JR154	G3
JR155	G3
JR156	G4
JR160	G5
JR161	G5
JR162	G2
JR163	G2
JR165	G1
JR166	B6
JR167	B6

JR168	B7
JR171	C1
JR172	F4
JR173	E1
JR174	D0
JR175	F3
JR901*	B0
JR902*	D0
JR903*	B1
JR904*	B1
JR905*	B0
JR906*	F3
JR907	F2
JR908*	B0
JV001	H7
JV002	K6
JV003	G8
JV004	G5
JV005	F6
JV006*	G7
JV007*	H6
IJV009	K5
JV010*	L5
JV011	K6
JV012	K6
JV013*	H6
JV014*	H6
JV015	G5
JV016	J10
JV017*	J5
JV021	K6
JV022	K6
JV023	J5
JV031*	G4
JV032*	G4
JV033	G4
JV034	G4
JV901*	G6
JV902*	G6
JX002	E8
JX003*	E8
JX004*	E8
JX005	G8
JX006	F8
JX007	F8
JX008	F9
JX009	G8
JX010	E9
JX011	G9
JX012	G9
JX013	F8
JX014	G10
JX015	G9
JX016	G9
JX017	G9
JX019	G10
JX020	H11
JX021	E11
JX022	E10
JX023*	E9
JX025*	D11
JX050*	E10
JX051*	E11
JX055	E8
JX056	F8
JX920	G9
JX922	F8
JX923	F10

LH004	C9
LI020	C5
LI051	E5
LI053	E7
LI070	E5
LI090	F7
LL001	R7
LL006	M5
LL008	M8
LL029	P10
LL030	Q9
LL031	R8
LL032	R11
LL033	N11
LL034	M10
LL037	P9
LL043	K8
LL045	H9
LL046	P7
LL047	P7
LL084	N6
LP019	Q2
LP020	N3
LP021	P2
LP040	L0
LP042	N0
LP070	L3
LP112	Q5
LR002*	D0
LR003	E0
LR004	D3
LR005	B2
LR011*	D3

PI030	E7
PI035	D8
PI050	D7

QI053	D7
QI070	E5
QR001	D3

RA001*	A 1
RA002*	A0
RA003*	B3
RA004*	B4
RA005*	A 3
RA006*	A3
RA007*	A 3
RA008*	A 4
RA009*	B4
RA010*	B4
RA011*	B3
RA012 *	B4
RA013	A5
RA014	C3
RA016*	A0
RA017*	A1
RA018*	A1
RA019	E3
RA020*	A10
RA021*	A10
RA022*	A10
RA023*	A 10
RA024*	A9
RA025*	A9
RA026*	A9
RA027*	A 8
RA028*	A9
RA029*	A0
RA030	A7
RA031*	A2
RA032*	A 10
RA033*	A10
RA034*	B4
RA035*	A1
RA040*	A 9
RF002*	K10
RF003	K10
RF007*	K10
RF011	L10
RF012	K9
RF013	K9
RF015	K9
RF020	L10
RF023*	K9
RF024*	J9
RF025*	K9
RF026	J8
RF036*	K9
RH001*	C10
RH002*	C9
RH003*	C9
RH004*	C9
RH007	D9
RH008	H9
RH010*	C10
RH011*	C10
RI001*	C7
RI002*	E4
RI003*	C5
RI004*	B7
RI005*	C5
RI006*	C5
RI007*	D7
RI008*	C7
RI009*	C8
RI012*	C6
RI019*	C5
RI020*	C5
RI021*	D7
RI022*	C5
RI023*	C6
RI024*	C6
RI025*	C6
RI026*	C7
RI027*	D7
RI028*	D8
RI029*	E8
RI030*	E7
RI031*	E7
RI032*	F6
RI033*	D8
RI034*	C8
RI035*	D8
RI036	D8
RI037*	E7
RI038*	E8
RI039*	E8
RI040*	C5
RI041*	C6

RI042*	C5
RI043*	C6
RI044*	C6
RI045*	D8
RI049*	E6
RI050*	E6
RI051*	E6
RI052*	F6
RI053*	E 7
RI054*	C6
RI055*	E7
RI056*	E5
RI058*	D5
RI059*	E5
RI061*	E5
RI062*	D5
RI065*	D5
RI066*	D6
RI070*	F5
RI071*	F5
RI072*	E5
RI073*	E5
RI074*	E5
RI075*	F5
RI076*	D5
RI077*	E6
RI078*	F 4
RI079*	E4
RI082*	E5
RI083*	D5
RI084*	D4
RI090*	E8
RI091*	E7
RI092*	F7
RI093*	F7
RI094*	E8
RI095*	D8
RL001*	J5
RL002*	J5
RL003 *	J5
RL004	Q6
RL004	Q6
RL013	Q6
RL014	R7
RL015	R6
RL016*	R7
RL017*	R7
RL018*	R7
RL020*	J7
RL021*	K6
RL023	K6
RL024*	H8
RL025	K6
RL026*	P11
RL027*	P11
RL028	K6
RL029	P11
RL030	Q 10
RL030	Q10
RL037	P9
RL040	K8
RL043	K8
RL044*	L6
RL045*	L11
RL046*	N7
RL047	Q 6
RL048*	P7
RL050*	L6
RL051*	K7
RL052	M 6
RL053*	M6
RL054*	M6
RL055*	L7
RL056*	L7
RL057*	M 7
RL058*	L7
RL059*	Q6
RL063*	M 7
RL064*	P6
RL065*	P6
RL066*	Q7
RL067*	Q9
RL068*	Q 9
RL069*	Q9
RL070*	M 7
RL071*	L9
RL072*	K 9
RL073*	N6
RL080*	J6
RL081	K5
RL082	L6
RL084	P6
RL092*	L7
RL124*	N9
RL125*	N9
RL126*	M9
RL127*	M 9
RL129	P10
RL134*	N9
RL135*	N9
RL136*	M 9
RL137*	M9
RL146*	Q7
RL147*	Q7
RL149*	Q7

RL155*	L7
RL160*	L7
RL171*	L9
RL211*	L8
RL214*	K7
RP020	P0
RP022	N1
RP025	K2
RP025	K2
RP026*	K2
RP027*	K1
RP028	L1
RP029*	L1
RP030	L1
RP031	L1
RP032	M1
RP035	K2
RP040	L0
RP041*	M0
RP042*	M0
RP050	M2
RP051*	L1
RP052*	L0
RP053	L1
RP054	K1
RP054	K1
RP055	K3
RP056*	K0
RP059*	J1
RP060*	K1
RP061*	K1
RP062	J0
RP063*	K0
RP064*	J0
RP065*	K0
RP066	L1
RP067*	M0
RP068*	L1
RP069*	L0
RP070*	L2
RP100	R3
RP102*	M3
RP112	R4
RP112	R5
RP120*	M5
RP121*	L5
RP122*	M5
RP123*	K4
RP124*	K4
RP125*	L4
RP126*	K5
RP127*	K5
RP128	K5
RP129*	K5
RP130	L5
RP138*	J3
RP139*	K4
RP140*	H2
RP141*	H2
RP142*	H2
RP143*	J2
RP144*	H0
RP145*	H0
RP146*	H1
RP147*	H0
RP148*	H1
RP149*	J1
RP150*	P4
RP151*	P4
RP152*	N5
RP156	N4
RP157*	N4
RP158*	P4
RP159*	N4
RP160*	J4
RP161*	L4
RP162*	K3
RP163*	L3
RP164*	H1
RP165*	H1
RP166*	H0
RP167*	H0
RP168*	G0
RP170*	K6
RP171*	H4
RP172*	J4
RP173	K6
RP175*	H4
RP176*	H4
RP177*	H3
RP179*	J4
RP190*	A1
RP191*	A1
RP192*	A2
RP193*	A1
RP194*	B2
RR010*	D1
RR011*	C2
RR012*	C2
RR013*	F0
RR014*	G0
RR015	D1
RR016	D2
RR017	D1
RR018	F2

RR019	F 2
RR021	D4
RR025*	E0
RR026 *	E0
RR027*	E1
RR028*	D2
RR029*	F0
RR030 *	F0
RR031*	F0
RR032	E3
RR033	E3
RR034	E3
RR035	E3
RR036*	F0
RR037*	E0
RR038*	E0
RR039*	E0
RR040*	E0
RR041*	E1
RR042 *	F1
RR043 *	F0
RR044 *	C2
RR045 *	C2
RR048*	F2
RR049*	F2
RR050*	B2
RR051*	B1
RR052*	B2
RR053*	C2
RR055*	C2
RR056*	C2
RR057*	E3
RR060*	B2
RR061*	B1
RR062*	B3
RR063*	B2
RR065*	C2
RR066*	C2
RR067*	B2
RR070*	B2
RR071*	B3
RR072	B2
RR075*	B1
RR076*	B1
RR084*	G1
RR085	G2
RR086	C4
RR087	E2
RR088	C4
RR089	E2
RR091*	G0
RR093*	F1
RR097*	F3
RR098*	G1
RR099*	G1
RR100*	C2
RR103*	G4
RR104*	E1
RR105*	G1
RR106*	G0
RR107*	G1
RR171*	B2
RR910*	F4
RR924*	E2
RV001*	H8
RV002	H7
RV003*	J7
RV011*	H9
RV012*	H8
RV021*	G5
RV022*	J5
RV038*	G5
RV041*	G7
RV043*	G7
RV051*	G5
RV052*	G6
RV053*	H6
RV061*	H6
RV062*	H6
RV063*	H5
RV064	H5
RV066*	H5
RV071*	J6
RV072*	H6
RV073*	H5
RV074	H5
RV076*	H5
RV081*	J6
RV082 *	H6
RV083*	H5
RV084	H5
RV086*	H5
RV091*	H6
RV092*	H6
RV101*	L6
RV107*	J5
RV108*	K6
RV109*	K5
RV110*	L6
RV112*	K6
RV201*	H7
RV202*	F6
RV203*	F7
RV206*	H7
RV213*	J6

RV216*	J 6
RV221*	K7
RV222*	K6
RV223*	K7
RV231	K7
RV232	J7
RV233	J7
RV241*	J5
RV242*	J5
RX107*	H11
RX111*	H11
RX115*	H11
RX116*	H10
RX120*	H10
RX121*	H10
RX122	G10
RX130*	J11
RX131*	F8
RX132*	F8
RX133*	F8
RX134*	F8
RX140*	J11
RX150*	F10
RX151*	F10
RX215*	E11
RX220*	F11
RX221*	E11
RX250*	E10
RX251*	E10
RX280*	B8
RX281*	D10
RX282*	D10
RX301*	E11
RX303*	E11
RX350*	E10
RX351*	E10
RX900	F10
RX910	G10
RX911*	H10
RX912*	H10
RX920*	D9
RX921*	D10
RX922*	D10
RX950*	F9
RX951*	G8
RX955*	E9
RX956*	E9
RX960*	F9
RX961*	G8
RX965*	E9
RX966*	E9
RX991	H9
RX992	D9

TI010*	C5
TI020*	C6
TI030*	D8
TI031*	D8
TI032*	D8
TI033*	F6
TI034*	E8
TI040*	D5
TI045*	D5
TI050*	C6
TI070*	E4
TI090*	E7
TI091*	E7
TI092*	D8
TI093*	D8
TL001*	K5
TL004*	Q6
TL005*	R6
TL028	Q11
TL030	R8
TL030	R9
TL062*	K7
TL063*	M6
TP025*	K2
TP026*	K2
TP027 *	J0
TP060	N0
TP129*	L5
TP145*	H2
TP146	J2
TP150*	N5
TP152*	N4
TP161*	K3
TP162*	K3
TP166*	H0
TP167*	G0
TP170*	K6
TP175*	H4
TP190*	A1
TR002*	F0
TR048*	F2
TR091*	G0
TR095*	F2
TR102*	G4
TR105*	G1
TR106*	G2
TV002	H7

TV063*	H5
TV073*	H5
TV083*	H5
TV108	K6
TX910	H10
TX920	D10
TX950	F9
TX955*	E9
TX960*	F9
TX965*	E9

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TEILE - LOCALIZZAZIONE DEGLI ELEMENTI - LOCALIZACION DE LOS COMPONENTES

JR168	B7
JR171	C1
JR172	F4
JR173	E1
JR174	D0
JR175	F3
JR901*	B0
JR902*	D0
JR903*	B1
JR904*	B1
JR905*	B0
JR906*	F3
JR907	F2
JR908*	B0
JV001	H7
JV002	K6
JV003	G8
JV004	G5
JV005	F6
JV006*	G7
JV007*	H6
IJV009	K5
JV010*	L5
JV011	K6
JV012	K6
JV013*	H6
JV014*	H6
JV015	G5
JV016	J10
JV017*	J5
JV021	K6
JV022	K6
JV023	J5
JV031*	G4
JV032*	G4
JV033	G4
JV034	G4
JV901*	G6
JV902*	G6
JX002	E8
JX003*	E8
JX004*	E8
JX005	G8
JX006	F8
JX007	F8
JX008	F9
JX009	G8
JX010	E9
JX011	G9
JX012	G9
JX013	F8
JX014	G10
JX015	G9
JX016	G9
JX017	G9
JX019	G10
JX020	H11
JX021	E11
JX022	E10
JX023*	E9
JX025*	D11
JX050*	E10
JX051*	E11
JX055	E8
JX056	F8
JX920	G9
JX922	F8
JX923	F10

LH004	C9
LI020	C5
LI051	E5
LI053	E7
LI070	E5
LI090	F7
LL001	R7
LL006	M5
LL008	M8
LL029	P10
LL030	Q9
LL031	R8
LL032	R11
LL033	N11
LL034	M10
LL037	P9
LL043	K8
LL045	H9
LL046	P7
LL047	P7
LL084	N6
LP019	Q2
LP020	N3
LP021	P2
LP040	L0
LP042	N0
LP070	L3
LP112	Q5
LR002*	D0
LR003	E0
LR004	D3
LR005	B2
LR011*	D3

PI030	E7
PI035	D8
PI050	D7

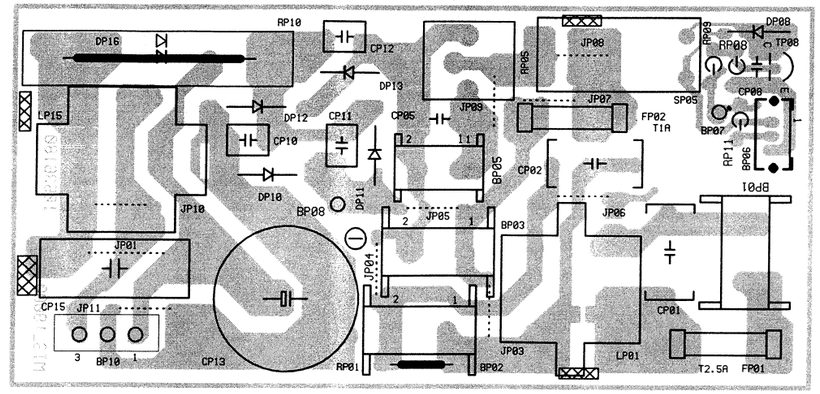
QI053	D7
QI070	E5
QR001	D3

RA001*	A 1
RA002*	A0
RA003*	B3
RA004*	B4
RA005*	A 3
RA006*	A3
RA007*	A 3
RA008*	A 4
RA009*	B4
RA010*	B4
RA011*	B3
RA012 *	B4
RA013	A5
RA014	C3
RA016*	A0
RA017*	A1
RA018*	A1
RA019	E3
RA020*	A10
RA021*	A10
RA022*	A10
RA023*	A 10
RA024*	A9
RA025*	A9
RA026*	A9
RA027*	A 8
RA028*	A9
RA029*	A0
RA030	A7
RA031*	A2
RA032*	A 10
RA033*	A10
RA034*	B4
RA035*	A1
RA040*	A 9
RF002*	K10
RF003	K10
RF007*	K10
RF011	L10
RF012	K9
RF013	K9
RF015	K9
RF020	L10
RF023*	K9
RF024*	J9
RF025*	K9
RF026	J8
RF036*	K9
RH001*	C10
RH002*	C9
RH003*	C9
RH004*	C9
RH007	D9
RH008	H9
RH010*	C10
RH011*	C10
RI001*	C7
RI002*	E4
RI003*	C5
RI004*	B7
RI005*	C5
RI006*	C5
RI007*	D7
RI008*	C7
RI009*	C8
RI012*	C6
RI019*	C5
RI020*	C5
RI021*	D7
RI022*	C5
RI023*	C6
RI024*	C6
RI025*	C6
RI026*	C7
RI027*	D7
RI028*	D8
RI029*	E8
RI030*	E7
RI031*	E7
RI032*	F6
RI033*	D8
RI034*	C8
RI035*	D8
RI036	D8
RI037*	E7
RI038*	E8
RI039*	E8
RI040*	C5
RI041*	C6
RI042*	C5
RI043*	C6
RI044*	C6
RI045*	D8
RI049*	E6
RI050*	E6
RI051*	E6
RI052*	F6
RI053*	E 7
RI054*	C6
RI055*	E7
RI056*	E5
RI058*	D5
RI059*	E5
RI061*	E5
RI062*	D5
RI065*	D5
RI066*	D6
RI070*	F5
RI071*	F5
RI072*	E5
RI073*	E5
RI074*	E5
RI075*	F5
RI076*	D5
RI077*	E6
RI078*	F 4
RI079*	E4
RI082*	E5
RI083*	D5
RI084*	D4
RI090*	E8
RI091*	E7
RI092*	F7
RI093*	F7
RI094*	E8
RI095*	D8
RL001*	J5
RL002*	J5
RL003 *	J5
RL004	Q6
RL004	Q6
RL013	Q6
RL014	R7
RL015	R6
RL016*	R7
RL017*	R7
RL018*	R7
RL020*	J7
RL021*	K6
RL023	K6
RL024*	H8
RL025	K6
RL026*	P11
RL027*	P11
RL028	K6
RL029	P11
RL030	Q 10
RL030	Q10
RL037	P9
RL040	K8
RL043	K8
RL044*	L6
RL045*	L11
RL046*	N7
RL047	Q 6
RL048*	P7
RL050*	L6
RL051*	K7
RL052	M 6
RL053*	M6
RL054*	M6
RL055*	L7
RL056*	L7
RL057*	M 7
RL058*	L7
RL059*	Q6
RL063*	M 7
RL064*	P6
RL065*	P6
RL066*	Q7
RL067*	Q9
RL068*	Q 9
RL069*	Q9
RL070*	M 7
RL071*	L9
RL072*	K 9
RL073*	N6
RL080*	J6
RL081	K5
RL082	L6
RL084	P6
RL092*	L7
RL124*	N9
RL125*	N9
RL126*	M9
RL127*	M 9
RL129	P10
RL134*	N9
RL135*	N9
RL136*	M 9
RL137*	M9
RL146*	Q7
RL147*	Q7
RL149*	Q7
RL155*	L7
RL160*	L7
RL171*	L9
RL211*	L8
RL214*	K7
RP020	P0
RP022	N1
RP025	K2
RP025	K2
RP026*	K2
RP027*	K1
RP028	L1
RP029*	L1
RP030	L1
RP031	L1
RP032	M1
RP035	K2
RP040	L0
RP041*	M0
RP042*	M0
RP050	M2
RP051*	L1
RP052*	L0
RP053	L1
RP054	K1
RP054	K1
RP055	K3
RP056*	K0
RP059*	J1
RP060*	K1
RP061*	K1
RP062	J0
RP063*	K0
RP064*	J0
RP065*	K0
RP066	L1
RP067*	M0
RP068*	L1
RP069*	L0
RP070*	L2
RP100	R3
RP102*	M3
RP112	R4
RP112	R5
RP120*	M5
RP121*	L5
RP122*	M5
RP123*	K4
RP124*	K4
RP125*	L4
RP126*	K5
RP127*	K5
RP128	K5
RP129*	K5
RP130	L5
RP138*	J3
RP139*	K4
RP140*	H2
RP141*	H2
RP142*	H2
RP143*	J2
RP144*	H0
RP145*	H0
RP146*	H1
RP147*	H0
RP148*	H1
RP149*	J1
RP150*	P4
RP151*	P4
RP152*	N5
RP156	N4
RP157*	N4
RP158*	P4
RP159*	N4
RP160*	J4
RP161*	L4
RP162*	K3
RP163*	L3
RP164*	H1
RP165*	H1
RP166*	H0
RP167*	H0
RP168*	G0
RP170*	K6
RP171*	H4
RP172*	J4
RP173	K6
RP175*	H4
RP176*	H4
RP177*	H3
RP179*	J4
RP190*	A1
RP191*	A1
RP192*	A2
RP193*	A1
RP194*	B2
RR010*	D1
RR011*	C2
RR012*	C2
RR013*	F0
RR014*	G0
RR015	D1
RR016	D2
RR017	D1
RR018	F2
RR019	F 2
RR021	D4
RR025*	E0
RR026 *	E0
RR027*	E1
RR028*	D2
RR029*	F0
RR030 *	F0
RR031*	F0
RR032	E3
RR033	E3
RR034	E3
RR035	E3
RR036*	F0
RR037*	E0
RR038*	E0
RR039*	E0
RR040*	E0
RR041*	E1
RR042 *	F1
RR043 *	F0
RR044 *	C2
RR045 *	C2
RR048*	F2
RR049*	F2
RR050*	B2
RR051*	B1
RR052*	B2
RR053*	C2
RR055*	C2
RR056*	C2
RR057*	E3
RR060*	B2
RR061*	B1
RR062*	B3
RR063*	B2
RR065*	C2
RR066*	C2
RR067*	B2
RR070*	B2
RR071*	B3
RR072	B2
RR075*	B1
RR076*	B1
RR084*	G1
RR085	G2
RR086	C4
RR087	E2
RR088	C4
RR089	E2
RR091*	G0
RR093*	F1
RR097*	F3
RR098*	G1
RR099*	G1
RR100*	C2
RR103*	G4
RR104*	E1
RR105*	G1
RR106*	G0
RR107*	G1
RR171*	B2
RR910*	F4
RR924*	E2
RV001*	H8
RV002	H7
RV003*	J7
RV011*	H9
RV012*	H8
RV021*	G5
RV022*	J5
RV038*	G5
RV041*	G7
RV043*	G7
RV051*	G5
RV052*	G6
RV053*	H6
RV061*	H6
RV062*	H6
RV063*	H5
RV064	H5
RV066*	H5
RV071*	J6
RV072*	H6
RV073*	H5
RV074	H5
RV076*	H5
RV081*	J6
RV082 *	H6
RV083*	H5
RV084	H5
RV086*	H5
RV091*	H6
RV092*	H6
RV101*	L6
RV107*	J5
RV108*	K6
RV109*	K5
RV110*	L6
RV112*	K6
RV201*	H7
RV202*	F6
RV203*	F7
RV206*	H7
RV213*	J6
RV216*	J 6
RV221*	K7
RV222*	K6
RV223*	K7
RV231	K7
RV232	J7
RV233	J7
RV241*	J5
RV242*	J5
RX107*	H11
RX111*	H11
RX115*	H11
RX116*	H10
RX120*	H10
RX121*	H10
RX122	G10
RX130*	J11
RX131*	F8
RX132*	F8
RX133*	F8
RX134*	F8
RX140*	J11
RX150*	F10
RX151*	F10
RX215*	E11
RX220*	F11
RX221*	E11
RX250*	E10
RX251*	E10
RX280*	B8
RX281*	D10
RX282*	D10
RX301*	E11
RX303*	E11
RX350*	E10
RX351*	E10
RX900	F10
RX910	G10
RX911*	H10
RX912*	H10
RX920*	D9
RX921*	D10
RX922*	D10
RX950*	F9
RX951*	G8
RX955*	E9
RX956*	E9
RX960*	F9
RX961*	G8
RX965*	E9
RX966*	E9
RX991	H9
RX992	D9

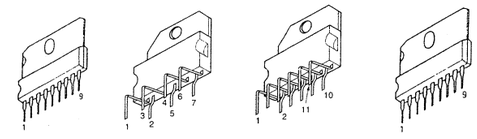
TI010*	C5
TI020*	C6
TI030*	D8
TI031*	D8
TI032*	D8
TI033*	F6
TI034*	E8
TI040*	D5
TI045*	D5
TI050*	C6
TI070*	E4
TI090*	E7
TI091*	E7
TI092*	D8
TI093*	D8
TL001*	K5
TL004*	Q6
TL005*	R6
TL028	Q11
TL030	R8
TL030	R9
TL062*	K7
TL063*	M6
TP025*	K2
TP026*	K2
TP027 *	J0
TP060	N0
TP129*	L5
TP145*	H2
TP146	J2
TP150*	N5
TP152*	N4
TP161*	K3
TP162*	K3
TP166*	H0
TP167*	G0
TP170*	K6
TP175*	H4
TP190*	A1
TR002*	F0
TR048*	F2
TR091*	G0
TR095*	F2
TR102*	G4
TR105*	G1
TR106*	G2
TV002	H7

TV063*	H5
TV073*	H5
TV083*	H5
TV108	K6
TX910	H10
TX920	D10
TX950	F9
TX955*	E9
TX960*	F9
TX965*	E9

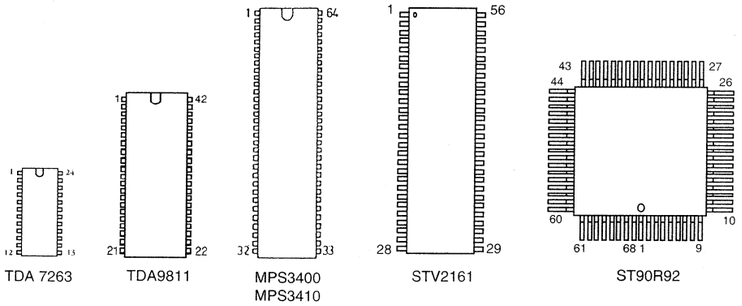
MAINS FILTER - MIS 19000



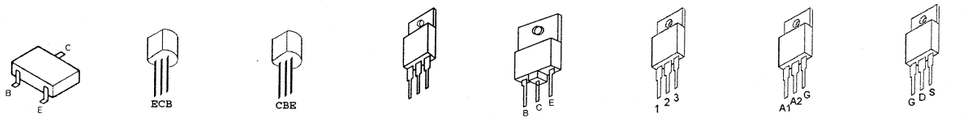
INTEGRATED CIRCUITS AND TRANSISTORS OUTLINE - CIRCUITS INTEGRES ET TRANSISTORS
INTEGRIERTE SCHALTUNGEN UND TRANSISTOREN - CIRCUITI INTEGRATI TRANSISTOR
CIRCUITOS INTEGRADOS Y TRANSISTORES



TDA 8139 · TDA 8177 · TDA7269 · TEA 5101B · 4N25TV · TDA4605 ST24C04-B1 · STV2145 · TEA6415C

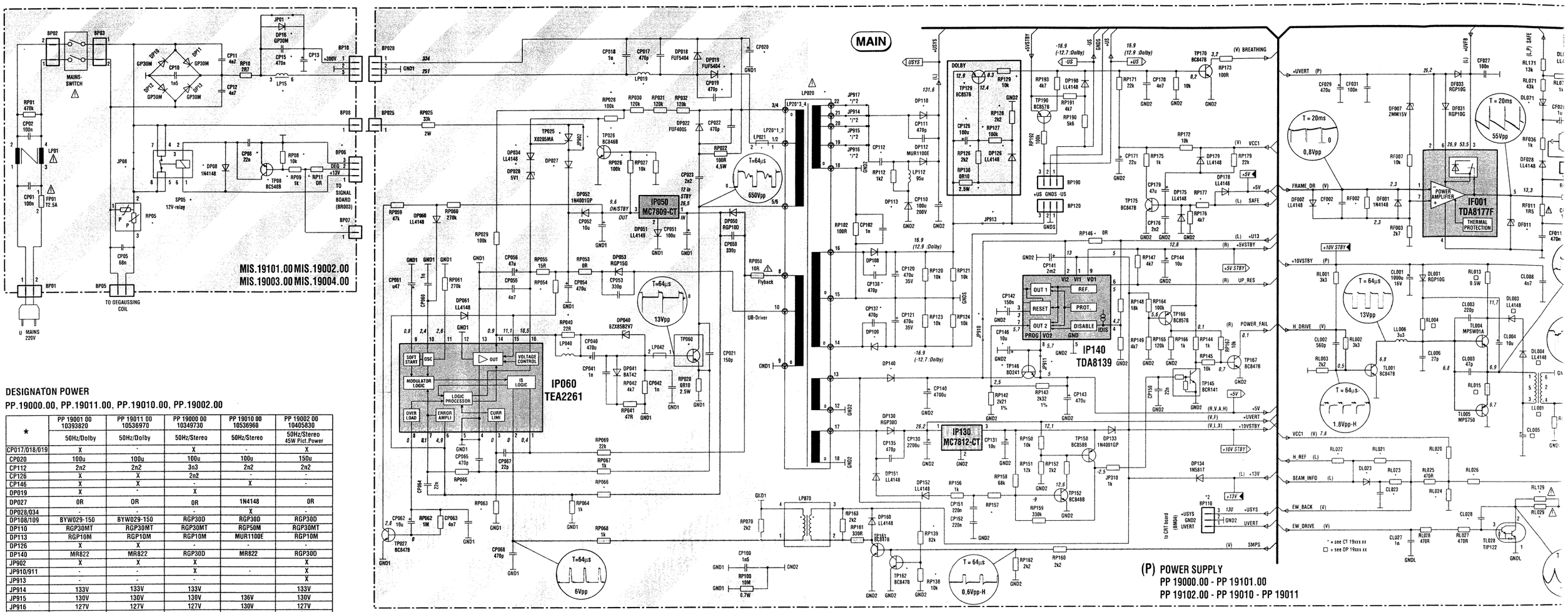


TDA 7263 · TDA9811 · MPS3400 MPS3410 · STV2161 · ST90R92



BCR141- BC846B BC 847B-BC856B BC857B-BF 799 BC 848 A/B/C · BC368 BF 422 BF423 · BC 337 BC 548B BC 558B · 2SA1837 2SC4793 BD 241 · BUL810TH BUV48CFITH16 ON4977 · 7805 7812 · BT806 -600C · STP6 NA60F1

COMPLETE PCB DIAGRAM - SCHEMA PLATINE PRINCIPALE EQUIPEE - SCHALTUNG LEITERPLATTE KPL - SCHEMA PIASTRA COMPLETA - ESQUEMA PLATINA EQUIPADA



DESIGNATON POWER

PP.19000.00, PP.19011.00, PP.19010.00, PP.19002.00

*	PP 19001 00 10393820	PP 19011 00 10536970	PP 19000 00 10349730	PP 19010 00 10536960	PP 19002 00 10405830
	50Hz/Dolby	50Hz/Dolby	50Hz/Stereo	50Hz/Stereo	50Hz/Stereo 45W Pict.Power
CP017/018/019	X	-	X	-	X
CP020	100u	100u	100u	100u	150u
CP112	2n2	2n2	3n3	2n2	2n2
CP126	X	X	2n2	-	-
CP146	X	X	-	X	-
DP019	X	-	X	-	-
DP027	0R	0R	0R	1N4148	0R
DP028/034	-	-	-	X	-
DP108/109	BYW029-150	BYW029-150	RGP30D	RGP30D	RGP30D
DP110	RGP30MT	RGP30MT	RGP30MT	RGP50M	RGP30MT
DP113	RGP10M	RGP10M	RGP10M	MUR1100E	RGP10M
DP126	X	X	-	-	-
DP140	MR822	MR822	RGP30D	MR822	RGP30D
JP902	X	X	X		X
JP910/911	-	-	X	-	X
JP913	-	-	-		X
JP914	133V	133V	133V		133V
JP915	130V	130V	130V	136V	130V
JP916	127V	127V	127V	130V	127V
JP917	136V	136V	136V	142V	136V
LP019	180u	X	180u	105u	180u
LP020	10385280	10536280	10378130	10459670	10378130
LP020	10385280	10536280	10378130	10459670	10378130
LP021	X	-	X	X	X
LP040	4u7	4u7	4u7	2u2	4u7
RP026/028	-	-	-	X	-
RP027	-	-	-	X	-
RP040	1/4W	1/4W	1/4W	1/2W	1/4W
RP054	5R6	5R6	5R6	6R8	5R6
RP063	10k	10k	10k	47k	10k
RP065	10k	12k1	10k	12k1	10k
RP066	3k48	3k57	3k48	3k57	3k48
RP126/128	X	X	-	-	-
RP127/129	X	X	-	-	-
RP130	X	X	-	-	-
RP138/139	-	-	-	X	-
RP146	X	X	-	X	-
RP157	150k	150k	150k	130k	150k
RP177	22k	22k	22k	130k	22k
TP025/026	-	-	X	X	-
TP060	BUV48CFI	BUV48CFI	BUV48CFI	BUL810TH	BUV48CFI
TP129	X	X	-	X	-
TP146	X	X	-	X	-
TP162	-	-	-	X	-

X Inserted
– Not inserted

*	different comp.	BP06	BP07	CP08	CP13	CP15	DP08	DP16	JP01	JP08	LP15	RP05	RP08	RP09	SP05	TP08
MIS.19101	100Hz/+relay	X	X	X	150u	X	X	X	–	–	1.5mH	18R	X	X	X	X
MIS.19002	50Hz	–	–	–	100u	X	–	X	–	X	3mH	25R	–	–	–	–
MIS.19003	50Hz/+relay	X	X	X	100u	X	X	X	–	–	3mH	18R	X	X	X	X
MIS.19004	50Hz/45W Pict.Pow.	–	–	–	–	X	–	X	–	X	3mH	25R	–	–	–	–
MIS.19012	50Hz	–	–	–	100u	–	–	–	X	X	–	25R	–	–	–	–
MIS.19111	100Hz/+relay	X	X	X	150u	–	X	–	X	–	–	18R	X	X	X	X

X Inserted
– Not inserted

Part of board connected to mains supply.
Partie du chassis reliée au secteur.
Primärseite des Netzteils.
Parte dello châssis collegata alla rete.
Parte del chassis conectada a la red.

Use isolating mains transformer
Utilise un transformateur isolateur du secteur
Einen Trenntrafo verwenden
Utilizar un transformador aislador de red
Utilizzare un transformatore per isolarvi dalla rete

Note :
Power Supply primary circuit measurements.
- Use only (GND1) connection point.

Attention :
Mesure dans le bloc alimentation
- Utiliser la masse du bloc alimentation (GND1).

Achtung :
Bei Messungen im Primärnetzteil
- Primärnetzteilmasse verwenden (GND1).

Attentionze :
misure nell'alimentatore primario
- usare massa alimentazione primario (GND1).

Cuidado :
Medida en el bloque de alimentacion
- Utilizar la masa del bloque de alimentacion (GND1).

Safety Part
When repairing, use original part only
Piece de securite
N'utilisez que les pieces d'origine
Sicherheitsbauteil
Bei Ersatz nur Originalteil verwenden
Componenti di sicurezza
durante la ripazione usare componenti originali
Pieza de seguridad
Utilice solo piezas originales

□	Deflection - Basic Partlists	
	50Hz ZOOM	50Hz
	DP 19050 00	DP 19000 00
	10 34 99 70	10 34 99 60
BL052	X	–
CL005	220u/25V	220u/25V
CL036	–	2u2/250V
CL038	27n	27n
CL039	27n	27n
CL148	–	–
DL003/04	X	X
DL030	DTV32F-1500	DTV32F-1500
DL032	BYW76	BYW76
DL034/036	–	RGP10G
DL050	BZX85C30	BZX85C30
DL057	X	X
DL147/148	–	–
JL943	X	X
LL001	10 51 81 10	10 51 81 10
LL030	–	–
LL032	Jumper	Jumper
LL043	–	–
RF015	10R	10R
RL004	1k8	1k8
RL013	10R	10R
RL014	68R	68R
RL015	2R2	2R2
RL016/17	68R	68R
RL01	-	-
RL070	33k	33k
RL071	43k	43k
RL124/127	–	7k5
RL134/137	–	7k5
RL146	–	–
RL147	–	–
RL149	–	–
TL030	BUV48CFITH16	BUV48CFITH16
ZL041	MP125	MP125

*	Deflection - Picture Tube related Partlists		
	CT 19005 31	CT 19003 32	CT 19031 37
	10 51 08 90	10 35 15 20	10 44 62 60
	50Hz 25"SF-29"SF 4/3	50Hz 25-28"MP 4/3	50Hz ZOOM 28"SF-32" 16/9
CF002	1n5	1n5	1n5
CL023	10n	10n	10n
CL028	1n	47n	47n
CL029	3u3/63V	4u7/160V	4u7/160V
CL030	1n9/2KV	1n9/2KV	1n9/2K0V
CL031	14n4/1K6V	12n8/1K6V	12n8/1K6V
CL032	33n/400V	24n/400V	24n/400V
CL033	–	1u5/160V	1u5/160V
CL034	–	–	–
CL037	510n/250V	560n/250V	–
CL067	–	100n/100V	100n/100V
CL084	4n7/250V	4n7/250V	4n7/250V
CL211	–	–	–
DF011	10 35 18 80	10 35 18 80	10 35 18 80
DL023	BAV103	BAV103	BAV103
DL046	RGP10M	RGP10M	RGP10M
DL071	BZX55C33	BZX55C33	BZX55B11
DL092	–	–	–
JL932	X	X	X
JL933	X	X	X
JL934	X	–	–
JL936	–	–	X
JL937	–	–	–
JL985	–	–	–
LL008	10 51 77 20	10 51 77 40	10 51 77 50
LL029	10 37 74 20	10 09 50 60	10 09 50 60
LL030	–	–	–
LL031	LFBEAD 90R	LFBEAD 90R	LFBEAD 90R
LL033	–	–	–
LL034	–	–	–
LL037	24u	24u	24u
LL046	–	–	–
LL047	26u	26u	23u
LL084	24u	24u	24u

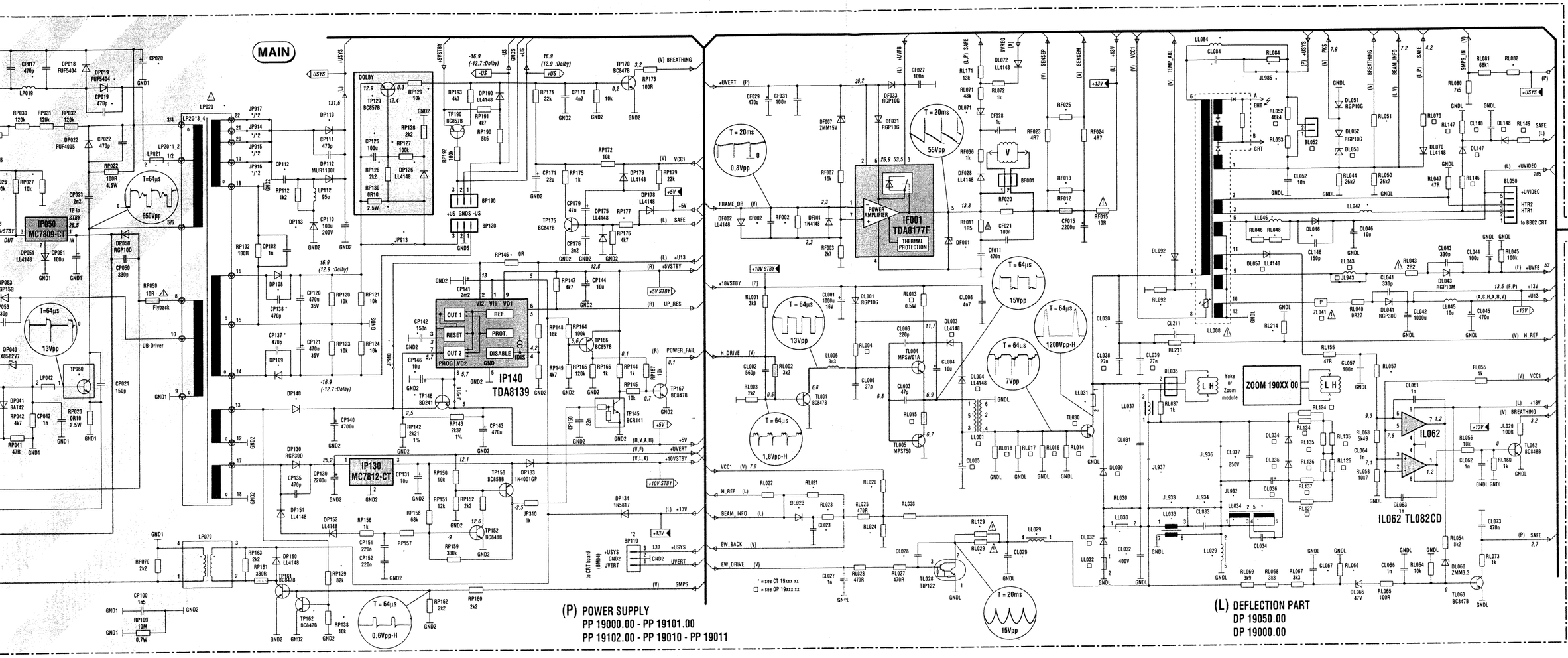
*	De
	CT
	10
	25"SF
RF002	
RF012	
RF013	
RF020	
RF025	
RL020	
RL021	
RL023	
RL024	
RL026	
RL029	
RL046/48	
RL051	
RL053	
RL057	
RL066	
RL082	
RL084	
RL092	
RL129	
RL211	
RL214	
ZOOM MODULE	

Note : the last
e.g. CT 19

Nota : Los do
e.g. CT

X Inserted
– Not inserte

ALTUNG LEITERPLATTE KPL - SCHEMA PIASTRA COMPLETA - ESQUEMA PLATINA EQUIPADA



JP08	LP15	RP05	RP08	RP09	SP05	TP08
—	1.5mH	18R	X	X	X	X
X	3mH	25R	—	—	—	—
—	3mH	18R	X	X	X	X
X	3mH	25R	—	—	—	—
X	—	25R	—	—	—	—
—	—	18R	X	X	X	X

upply.

e.

lu secteur

e rød
arvi dalla rete

Note :
Power Supply primary circuit measurements.
- Use only (GND1) connection point.

Attention :
Mesure dans le bloc alimentation
- Utiliser la masse du bloc alimentation (GND1).

Achtung :
Bei Messungen im Primärnetzteil
- Primärnetzteilmasse verwenden (GND1).

Attentionze :
misure nell'alimentatore primario
- usare massa alimentazione primario (GND1).

Cuidado :
Medida en el bloque de alimentacion
- Utilizar la masa del bloque de alimentacion (GND1).

⚠ Safety Part
When repairing, use original part only
Piece de securite
N'utilisez que les pieces d'origine
Sicherheitsbauteil
Bei Ersatz nur Originalteil verwenden
Componenti di sicurezza
durante la ripazione usare componenti originali
Pieza de seguridad
Utilice solo piezas originales

□	Deflection - Basic Partlists	
	50Hz ZOOM	50Hz
	DP 19050 00	DP 19000 00
	10 34 99 70	10 34 99 60
BL052	×	–
CL005	220u/25V	220u/25V
CL036	–	2u2/250V
CL038	27n	27n
CL039	27n	27n
CL148	–	–
DL003/04	×	×
DL030	DTV32F-1500	DTV32F-1500
DL032	BYW76	BYW76
DL034/036	–	RGP10G
DL050	BZX85C30	BZX85C30
DL057	×	×
DL147/148	–	–
JL943	×	×
LL001	10 51 81 10	10 51 81 10
LL030	–	–
LL032	Jumper	Jumper
LL043	–	–
RF015	10R	10R
RL004	1k8	1k8
RL013	10R	10R
RL014	68R	68R
RL015	2R2	2R2
RL016/17	68R	68R
RL01	-	-
RL070	33k	33k
RL071	43k	43k
RL124/127	–	7k5
RL134/137	–	7k5
RL146	–	–
RL147	–	–
RL149	–	–
TL030	BUV48CFITH16	BUV48CFITH16
ZL041	MP125	MP125

*	Deflection - Picture Tube related Partlists		
	CT 19005 31	CT 19003 32	CT 19031 37
	10 51 08 90	10 35 15 20	10 44 62 60
	50Hz 25"SF-29"SF 4/3	50Hz 25-28"MP 4/3	50Hz ZOOM 28"SF-32" 16/9
CF002	1n5	1n5	1n5
CL023	10n	10n	10n
CL028	1n	47n	47n
CL029	3u3/63V	4u7/160V	4u7/160V
CL030	1n9/2KV	1n9/2KV	1n9/2K0V
CL031	14n4/1K6V	12n8/1K6V	12n8/1K6V
CL032	33n/400V	24n/400V	24n/400V
CL033	–	1u5/160V	1u5/160V
CL034	–	–	–
CL037	510n/250V	560n/250V	–
CL067	–	100n/100V	100n/100V
CL084	4n7/250V	4n7/250V	4n7/250V
CL211	–	–	–
DF011	10 35 18 80	10 35 18 80	10 35 18 80
DL023	BAV103	BAV103	BAV103
DL046	RGP10M	RGP10M	RGP10M
DL071	BZX55C33	BZX55C33	BZX55B11
DL092	–	–	–
JL932	×	×	×
JL933	×	×	×
JL934	×	–	–
JL936	–	–	×
JL937	–	–	–
JL985	–	–	–
LL008	10 51 77 20	10 51 77 40	10 51 77 50
LL029	10 37 74 20	10 09 50 60	10 09 50 60
LL030	–	–	–
LL031	LFBEAD 90R	LFBEAD 90R	LFBEAD 90R
LL033	–	–	–
LL034	–	–	–
LL037	24u	24u	24u
LL046	–	–	–
LL047	26u	26u	23u
LL084	24u	24u	24u

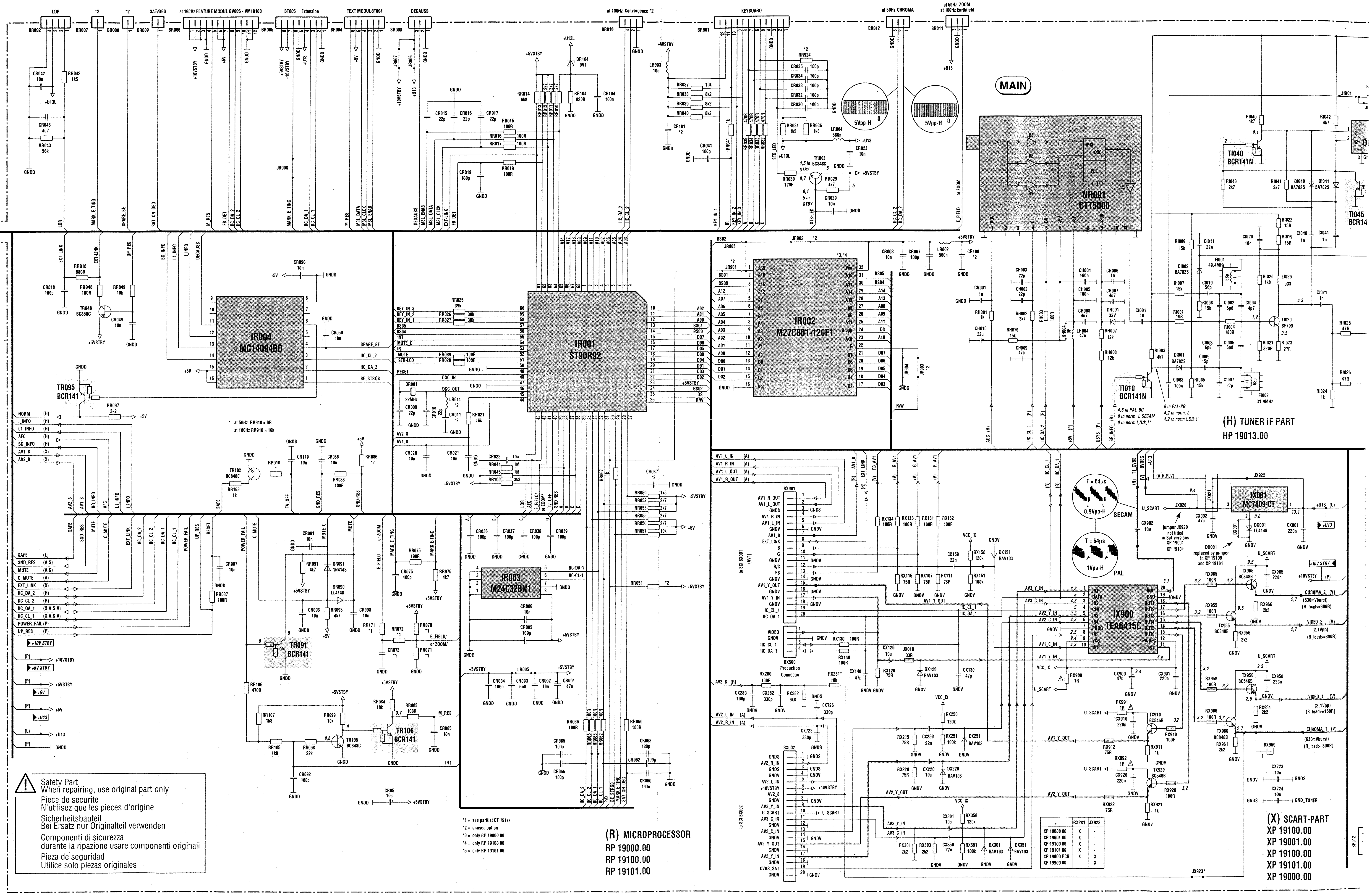
*	Deflection - Picture Tube related Partlists		
	CT 19005 31	CT 19003 32	CT 19031 37
	10 51 08 90	10 35 15 20	10 44 62 60
	50Hz 25"SF-29"SF 4/3	50Hz 25-28"MP 4/3	50Hz ZOOM 28"SF-32" 16/9
RF002	–	–	–
RF012	1R5	1R5	1R5
RF013	1R5	1R5	1R5
RF020	220R	220R	–
RF025	91R	221R	240R
RL020	3k09	3k09	3k09
RL021	–	–	–
RL023	100k	120k	120k
RL024	1k62	1k82	1k62
RL026	37k4	37k4	37k4
RL029	2R2	2R2	2R2
RL046/48	0R	0R	0R
RL051	750k	750k	750k
RL053	5k1	30k	8k2
RL057	40k2	39k2	40k2
RL066	1k8	–	–
RL082	56k2	56k2	61k9
RL084	12R	12R	12R
RL092	–	–	–
RL129	–	–	–
RL211	12k	12k	12k
RL214	2k7	2k7	2k7
ZOOM MODULE	–	–	10 39 10 40

Note : the last two numbers of the CT xxxx part list name indicates the system voltage.
e.g. CT 19005 31 Usys 131V →

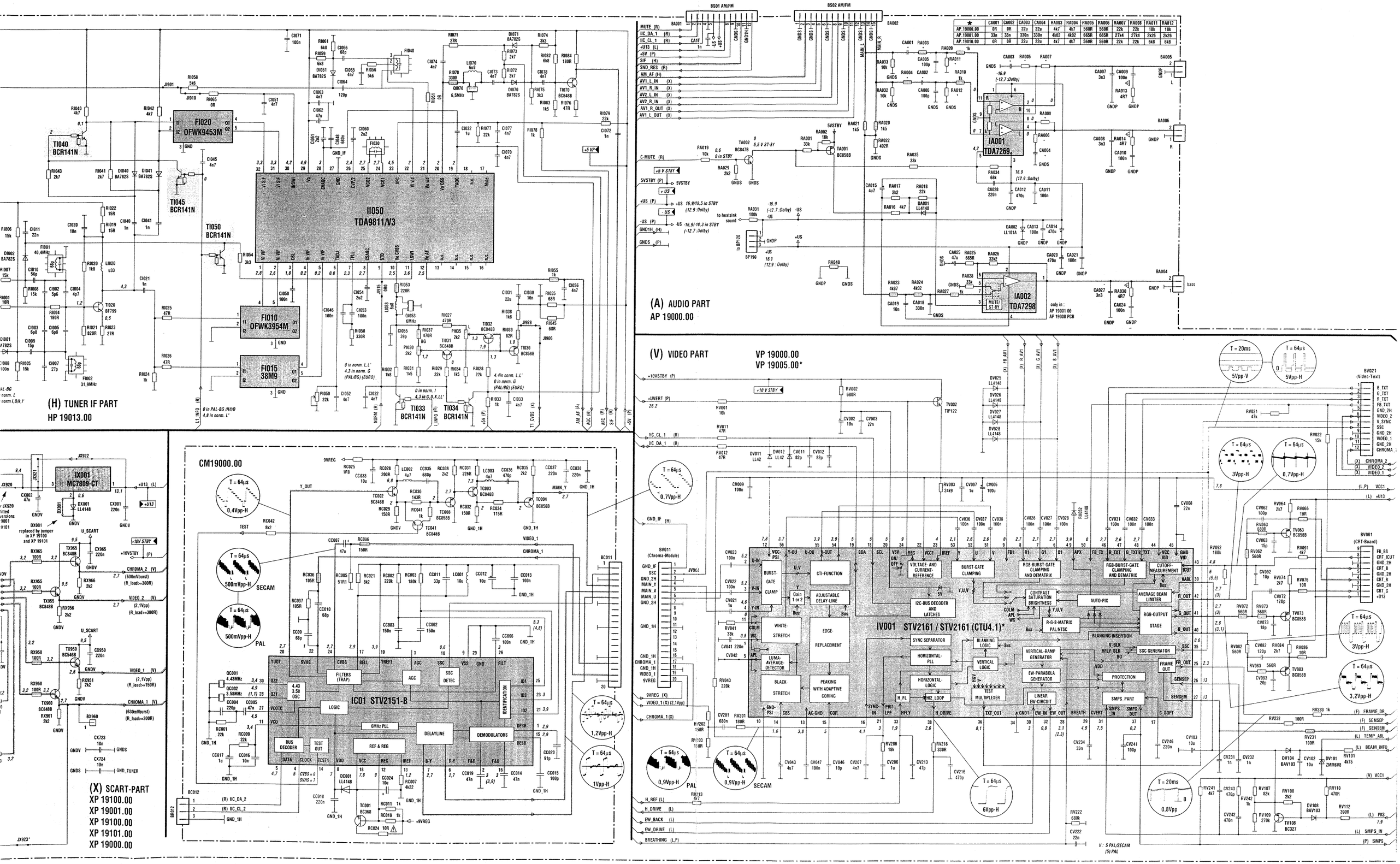
Nota : Los dos últimos números de la denominación CT xxxx, indica la tensión Usys
e.g. CT 19005 31 Usys 131V

X Inserted
– Not inserted

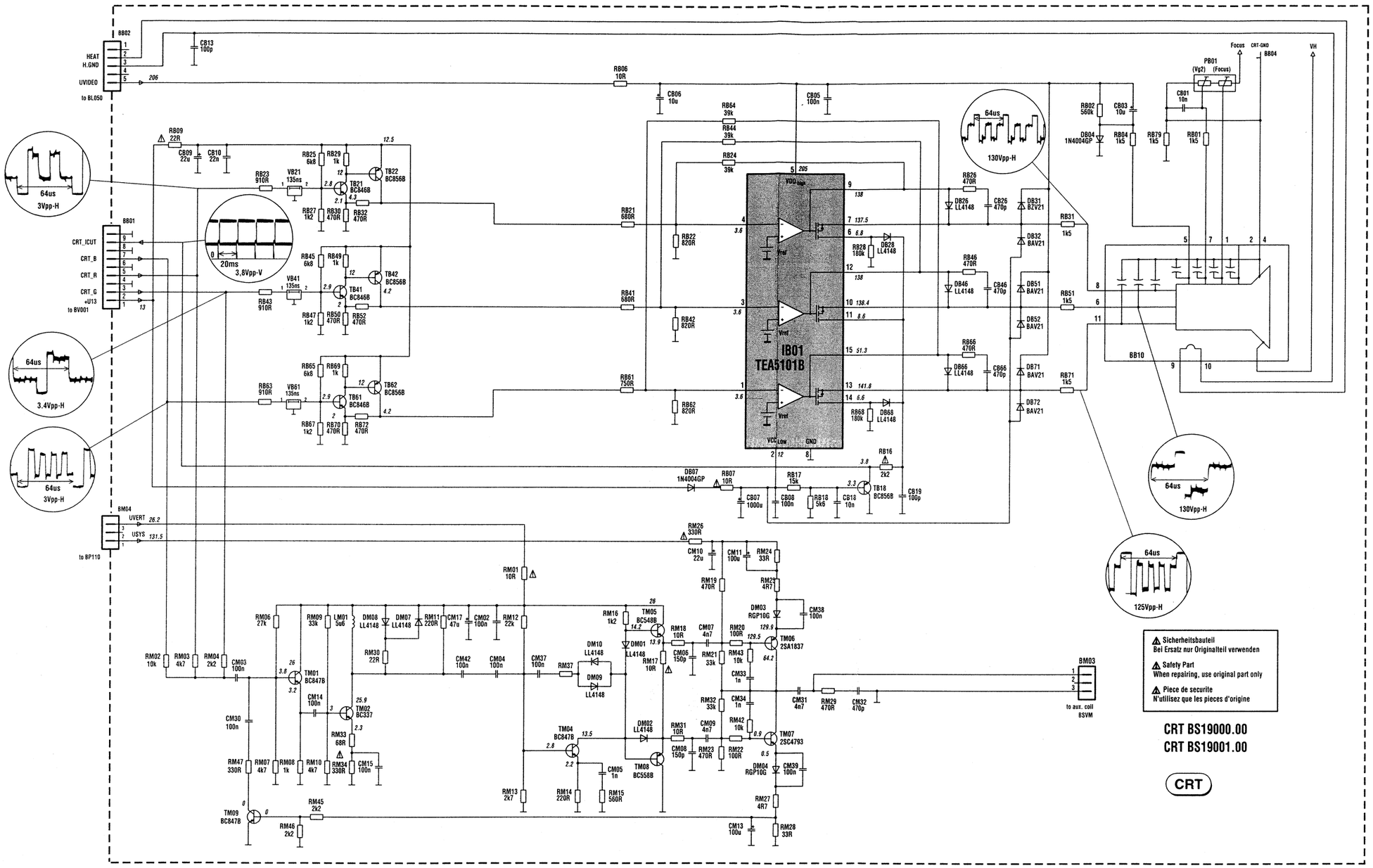
COMPLETE PCB DIAGRAM - SCHEMA PLATINE PRINCIPALE EQUIPEE - SCHALTUNG LEITERPLATTE KPL - SCHEMA PIASTRA COMPLETA - ESQUEMA PLATINA EQUIPADA

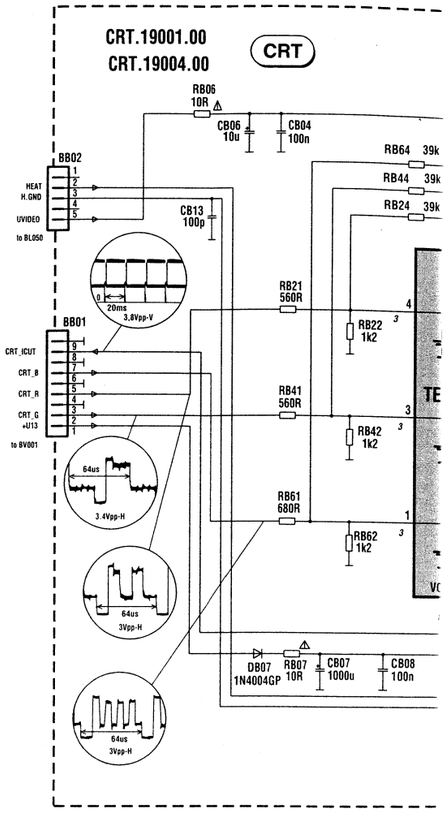


.	RX281	JX923
XP 19000 00	X	-
XP 19001 00	X	-
XP 19100 00	X	-
XP 19101 00	X	-
XP 19000 PCB	X	X
XP 19900 00	-	X


(H) TUNER IF PART
HP 19013.00
(A) AUDIO PART
AP 19000.00
(V) VIDEO PART
VP 19000.00
VP 19005.00*
(X) SCART-PART
XP 19100.00
XP 19001.00
XP 19100.00
XP 19101.00
XP 19000.00
CM19000.00
IC01 STV2151-B
IV001 STV2161 / STV2161 (CTU4.1)*
IA001 TDA7269
IA002 TDA7298
II050 TDA9811/V3
FI020 OFWK9453M
FI010 OFWK3954M
FI015 38M9
IX001 MC7809-CT
BS01 AM/FM
BS02 AM/FM
BV011 (Chroma-Module)
BV001 (CRT-Board)
BV021 (Video-Text)
V : 5 PAL/SECAM
(5) PAL

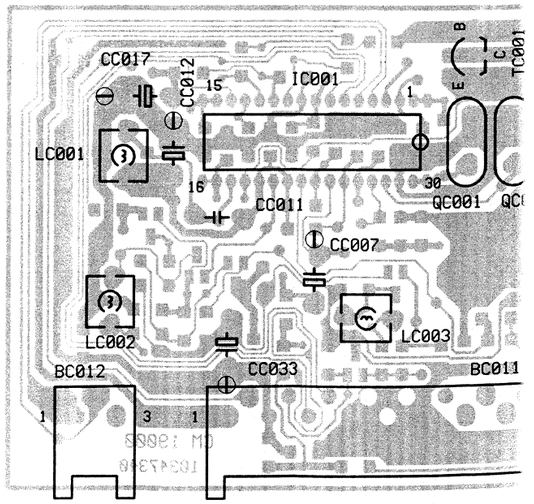
VIDEO AMPLIFIER BOARD - PLATINE AMPLIFICATEURS VIDEO - VIDEOVERSTÄRKERPLATTE - PIASTRA AMPLIFICATORE VIDEO - PLATINA AMPLIFICADOR VIDEO





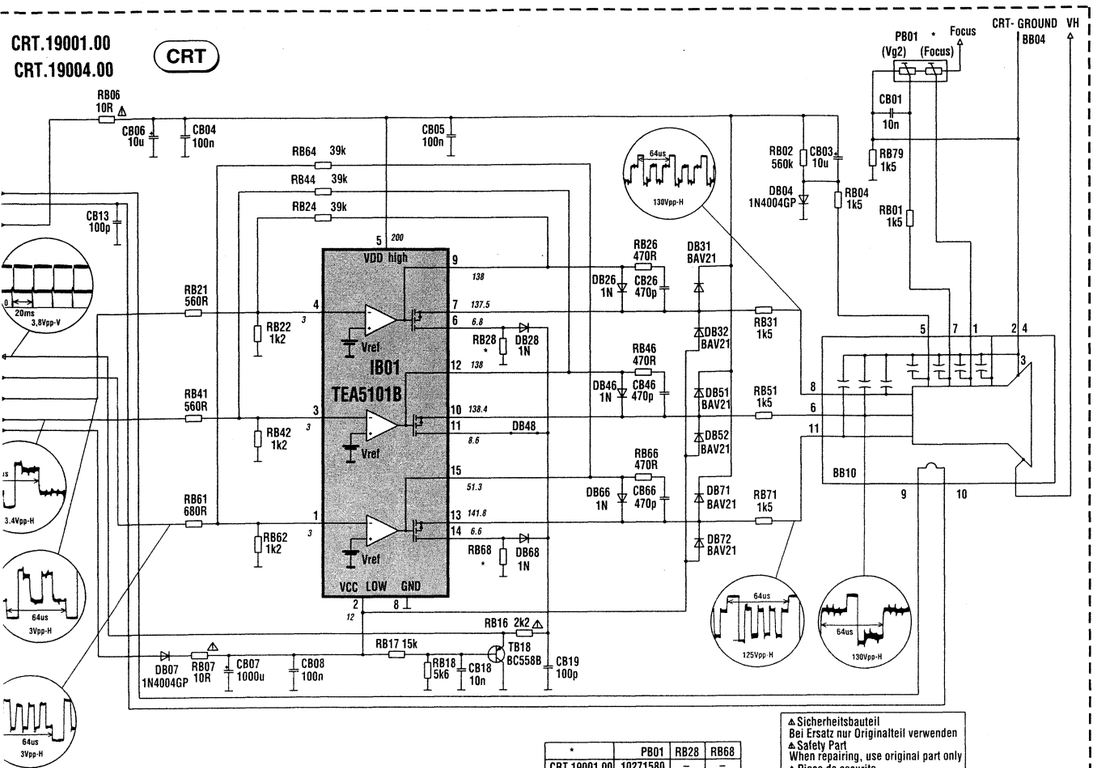
CHROM

COMPONENT SIDE - CÔTE COMPOSANTS - BESTÜC
LATO COMPONENTI - LADO COMPONEN



CRT.19001.00
CRT.19004.00

CRT

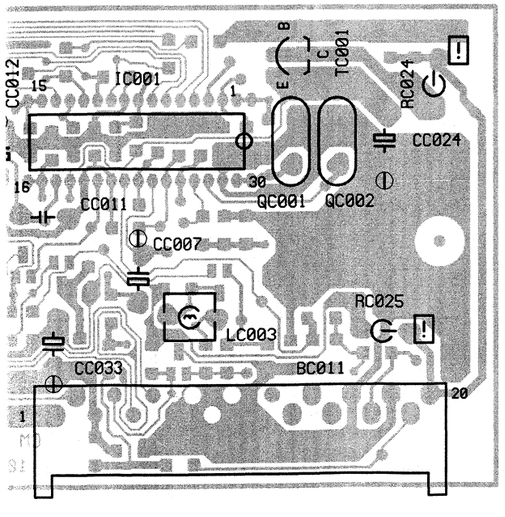


*	PB01	RB28	RB68
CRT 19001 00	10271580	–	–
CRT 19004 00	10343360	100k	120k

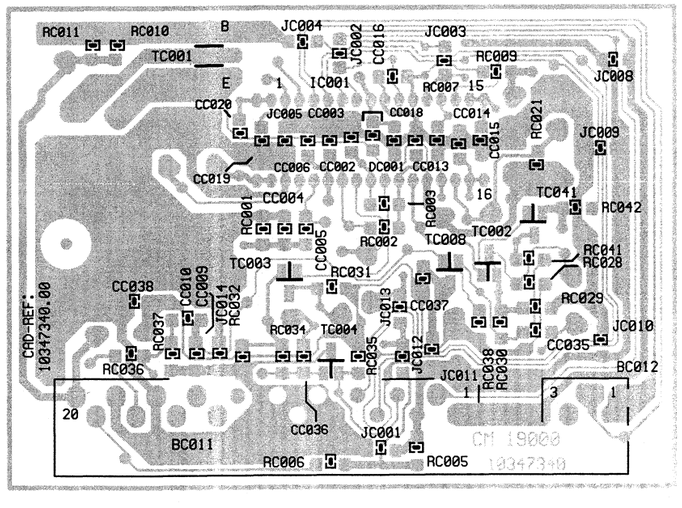
⚠ Sicherheitsbauteil
Bei Ersatz nur Originalteil verwenden
⚠ Safety Part
When repairing, use original part only
⚠ Piece de securite
N'utilisez que les pieces d'origine

CHROMA MODULE - CM 19000 00

DE - CÔTE COMPOSANTS - BESTÜCKUNGSSEITE -
COMPONENTI - LADO COMPONENTES

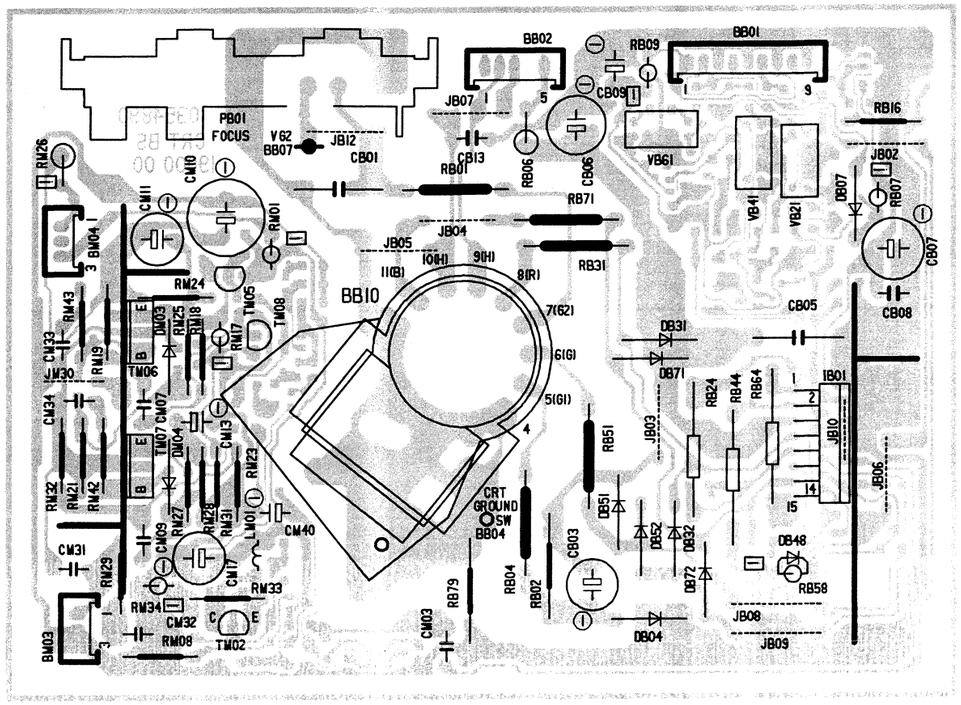


SOLDER SIDE - CÔTE SOUDURES - LÖTSEITE - LATO
SALDATURE - LADO SOLDADURAS

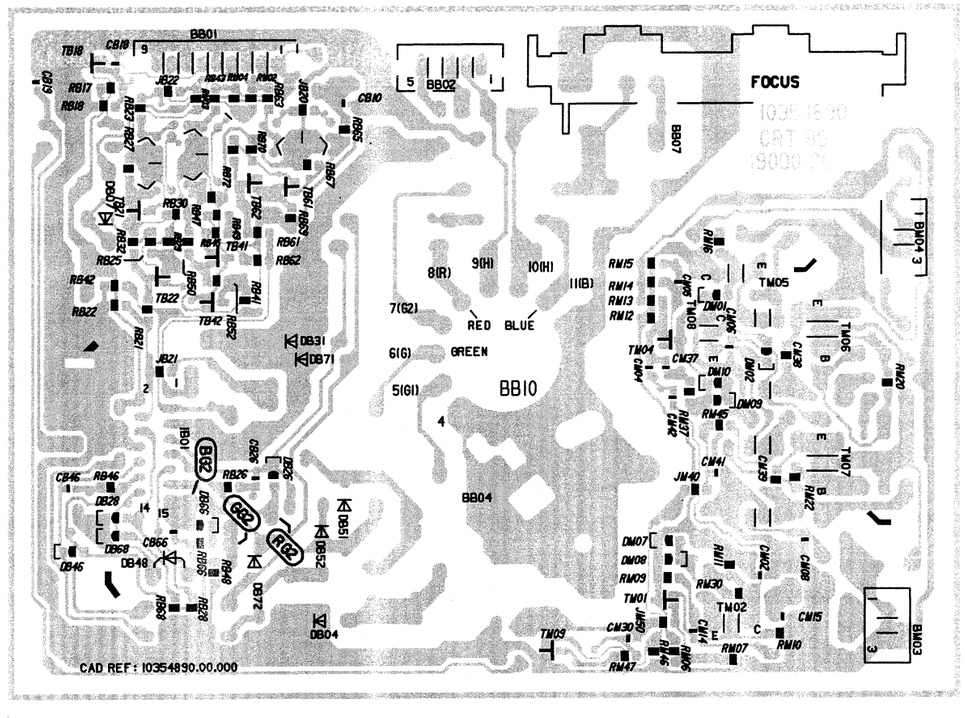


CRT BS19000

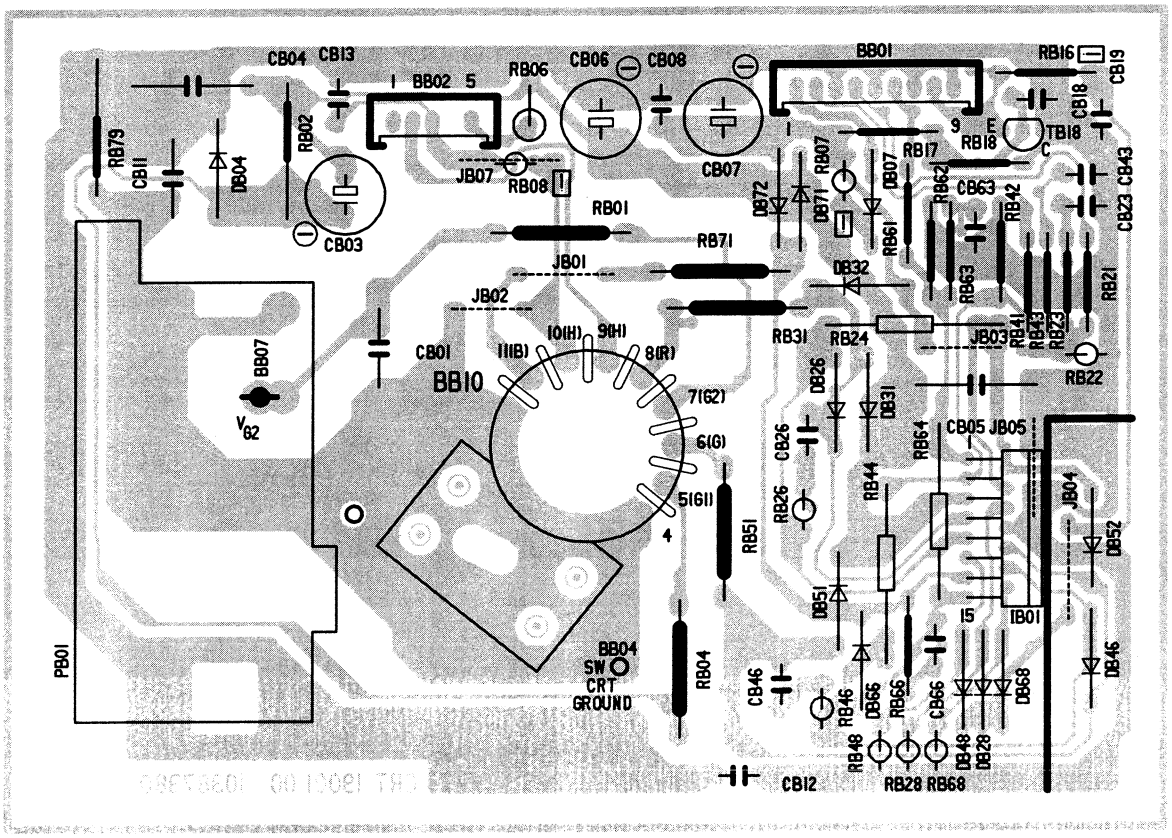
COMPONENT SIDE - CÔTE COMPOSANTS - BESTÜCKUNGSSEITE -
LATO COMPONENTI - LADO COMPONENTES



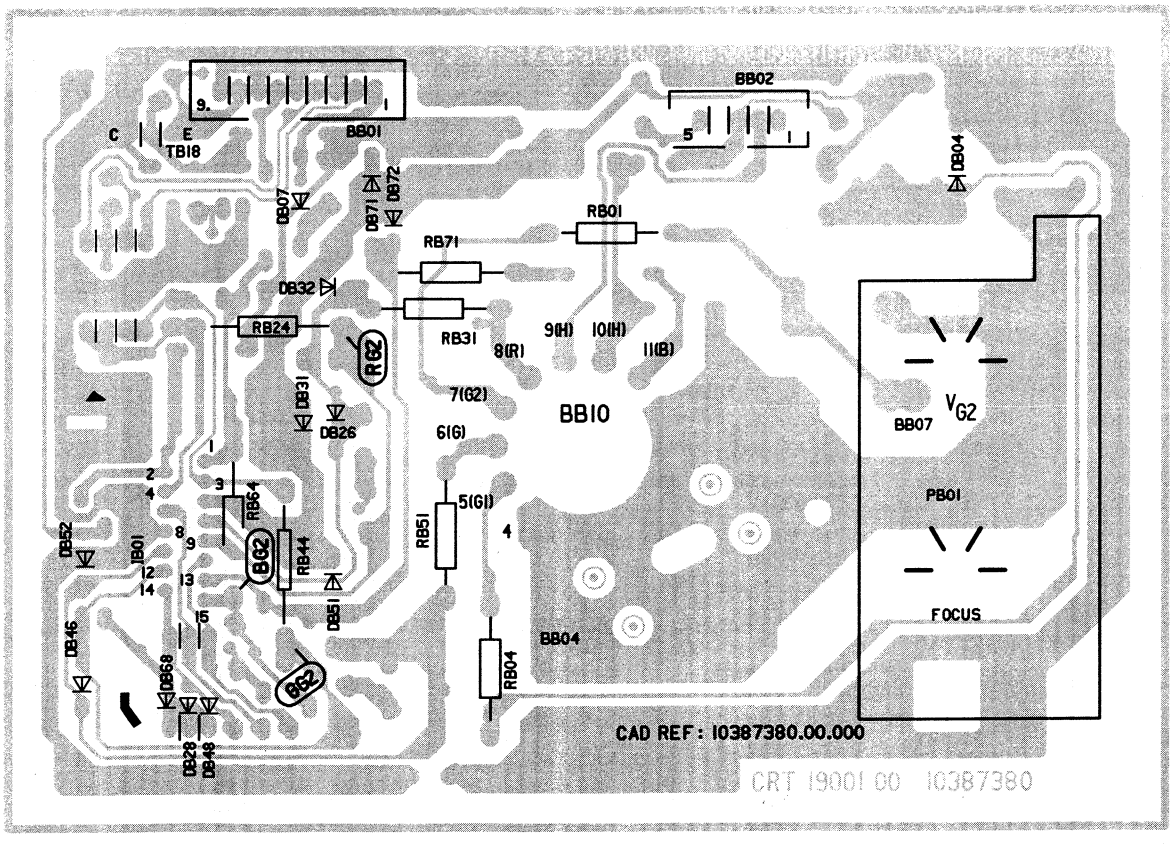
SOLDER SIDE - CÔTE SOUDURES - LÖTSEITE - LATO SALDATURE - LADO SOLDADURAS



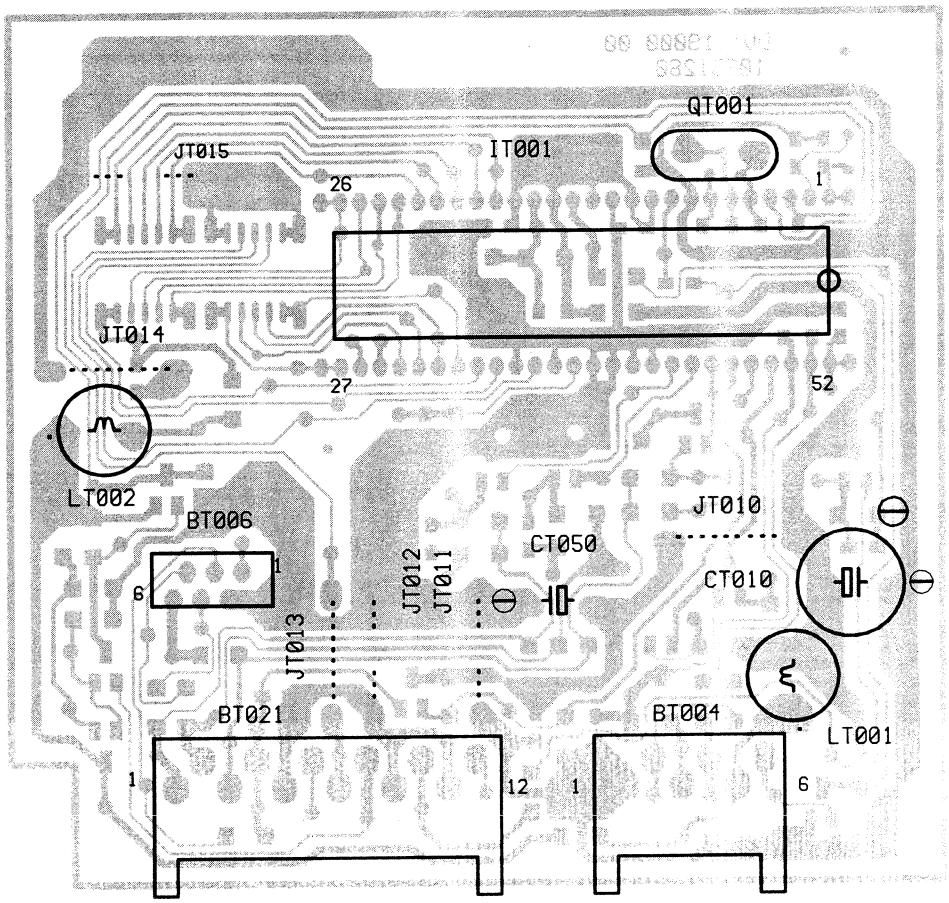
COMPONENT SIDE - CÔTE COMPOSANTS - BESTÜCKUNGSSEITE -
LATO COMPONENTI - LADO COMPONENTES



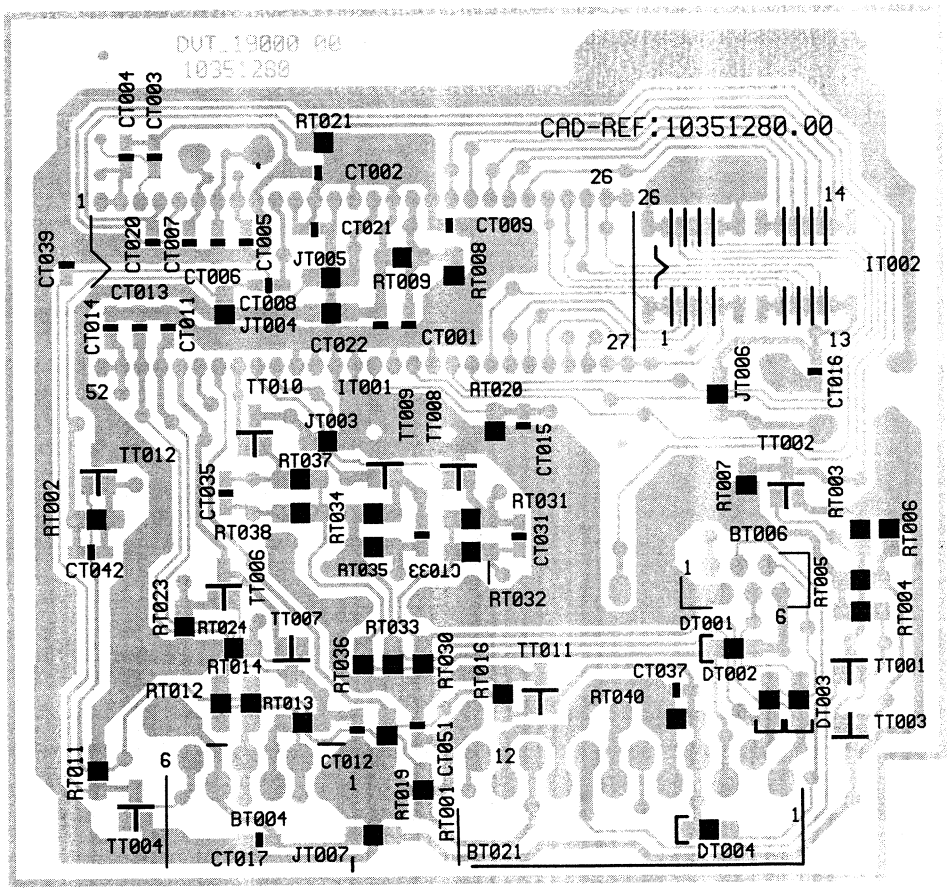
SOLDER SIDE - CÔTE SOUDURES - LÖTSEITE - LATO SALDATURE - LADO SOLDADURAS



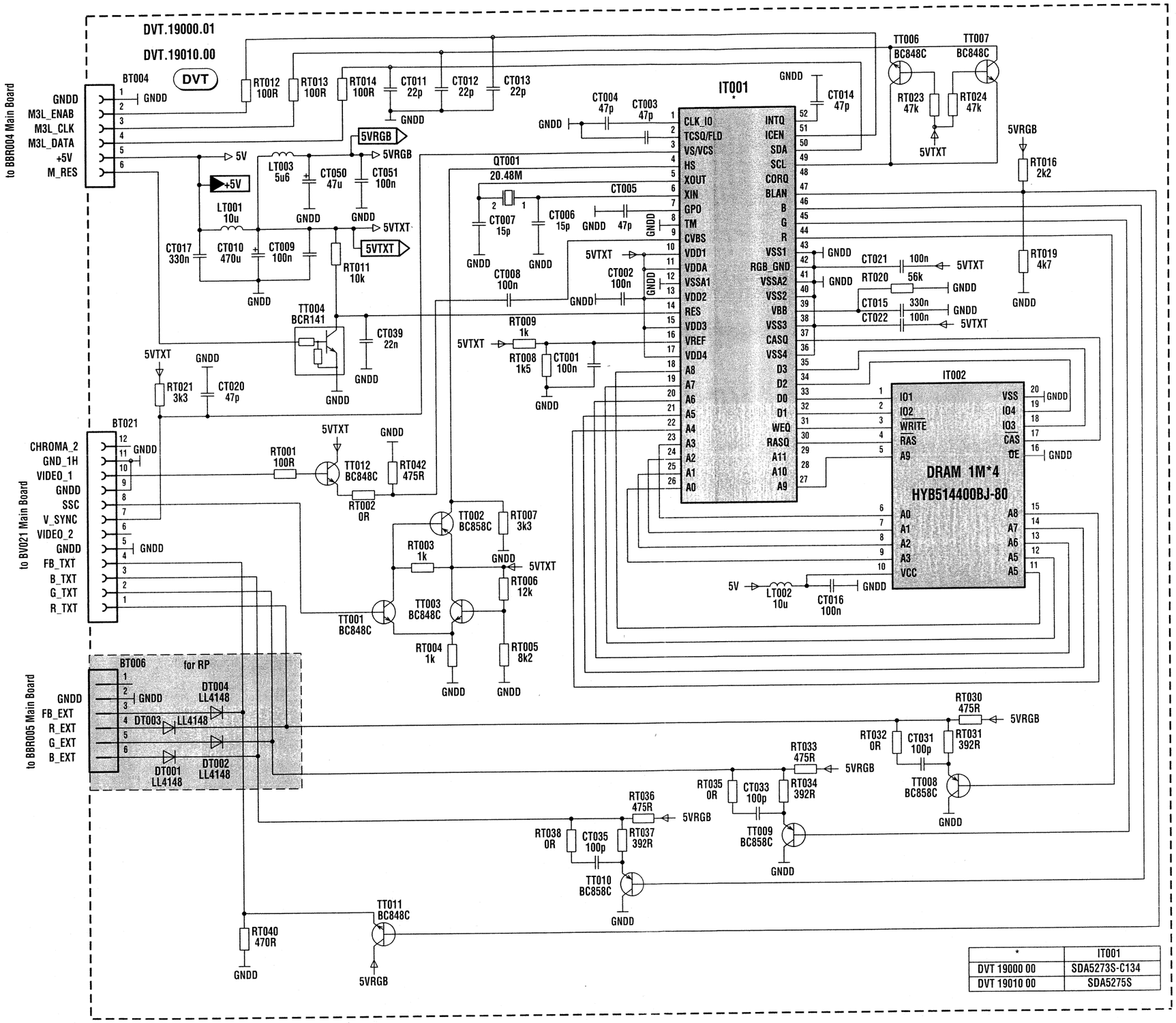
COMPONENT SIDE - COTE COMPOSANTS - BESTÜCKUNGSSEITE
LATO COMPONENTI - LADO COMPONENTES



SOLDER SIDE - CÔTE SOUDURES - LÖTSEITE - LATO SALDATURE - LADO SOLDADURAS



TELETEXT MODULE - MODULE TELETEXTE - VIDEOTEXT MODUL - MODULO TELEVIDEO - MÓDULO TELETEXTO



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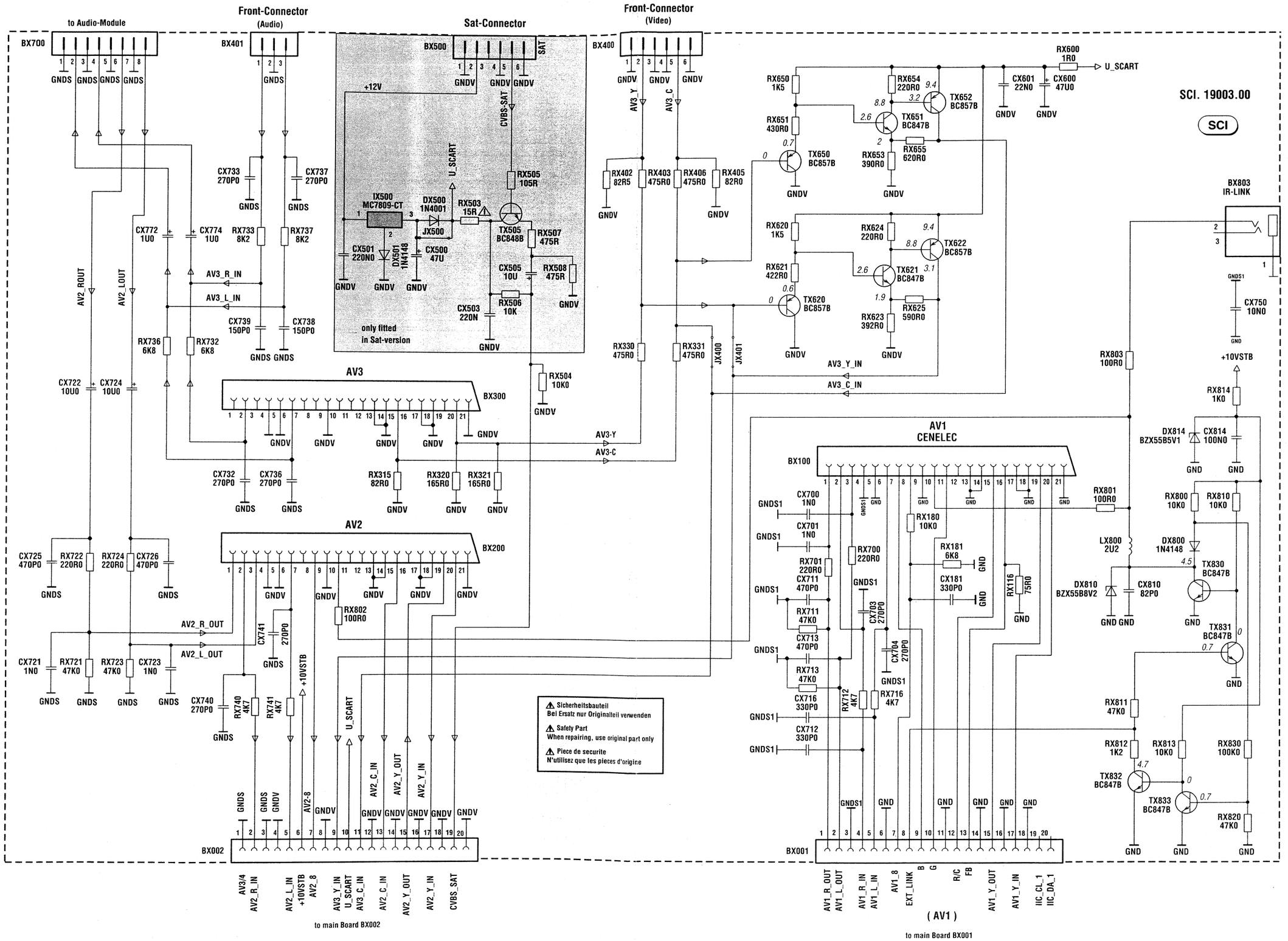
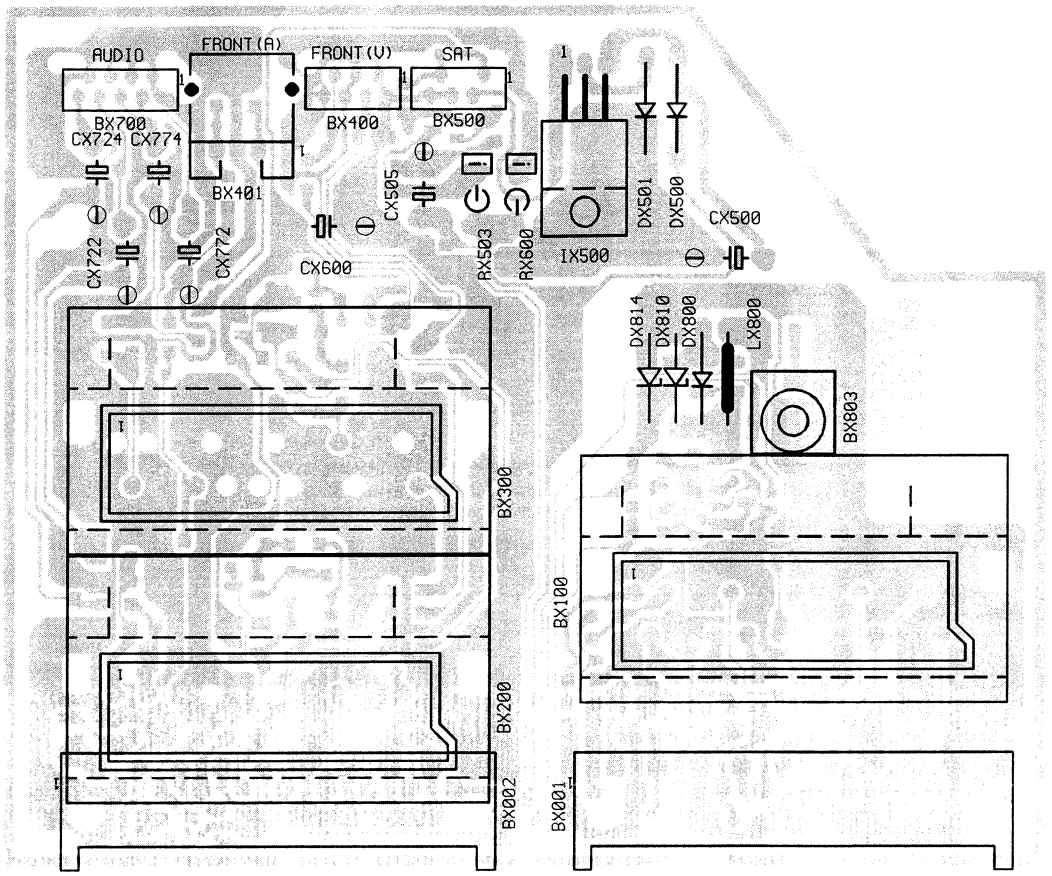
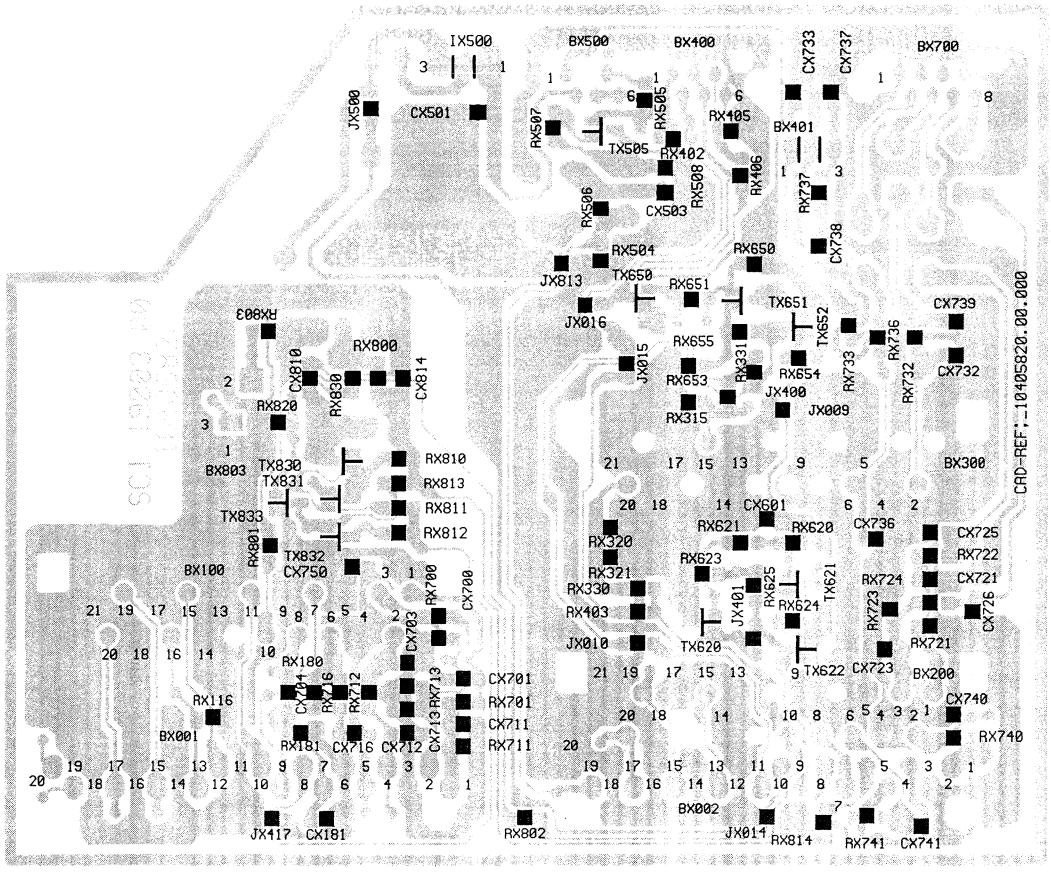


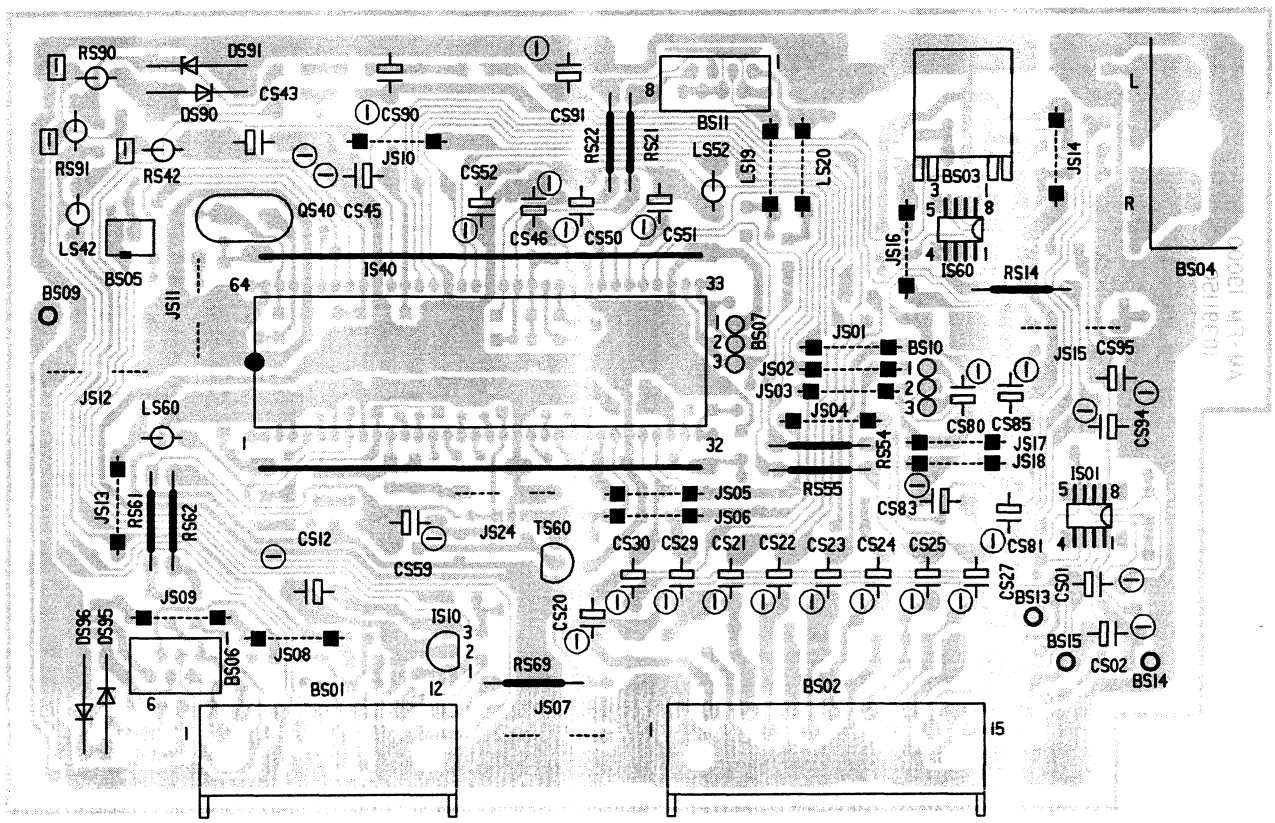
COMPONENT SIDE - COTE COMPOSANTS - BESTÜCKUNGSSEITE
LATO COMPONENTI - LADO COMPONENTES



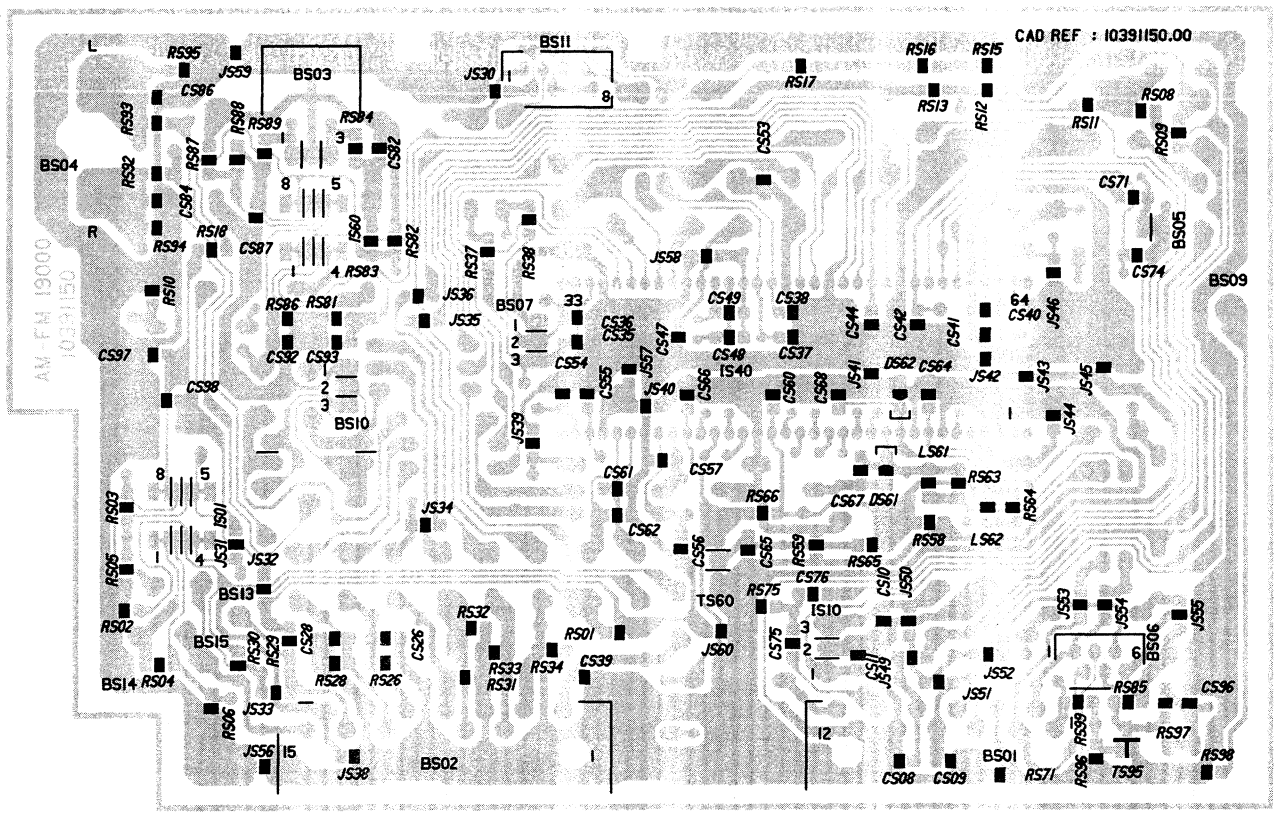
SOLDER SIDE - CÔTE SOUDURES - LÖTSEITE - LATO SALDATURE - LADO SOLDADURAS



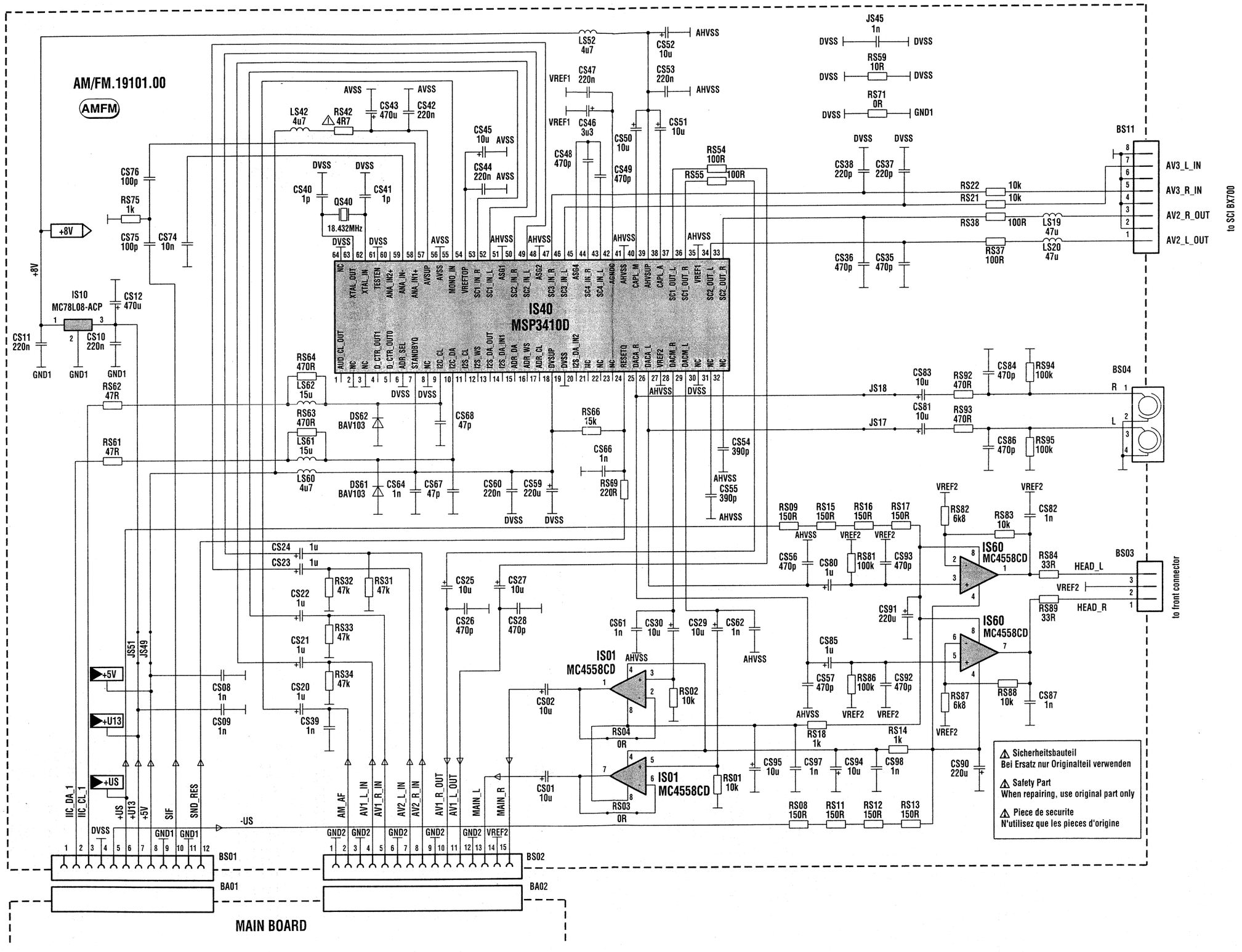
COMPONENT SIDE - COTE COMPOSANTS - BESTÜCKUNGSSEITE
LATO COMPONENTI - LADO COMPONENTES



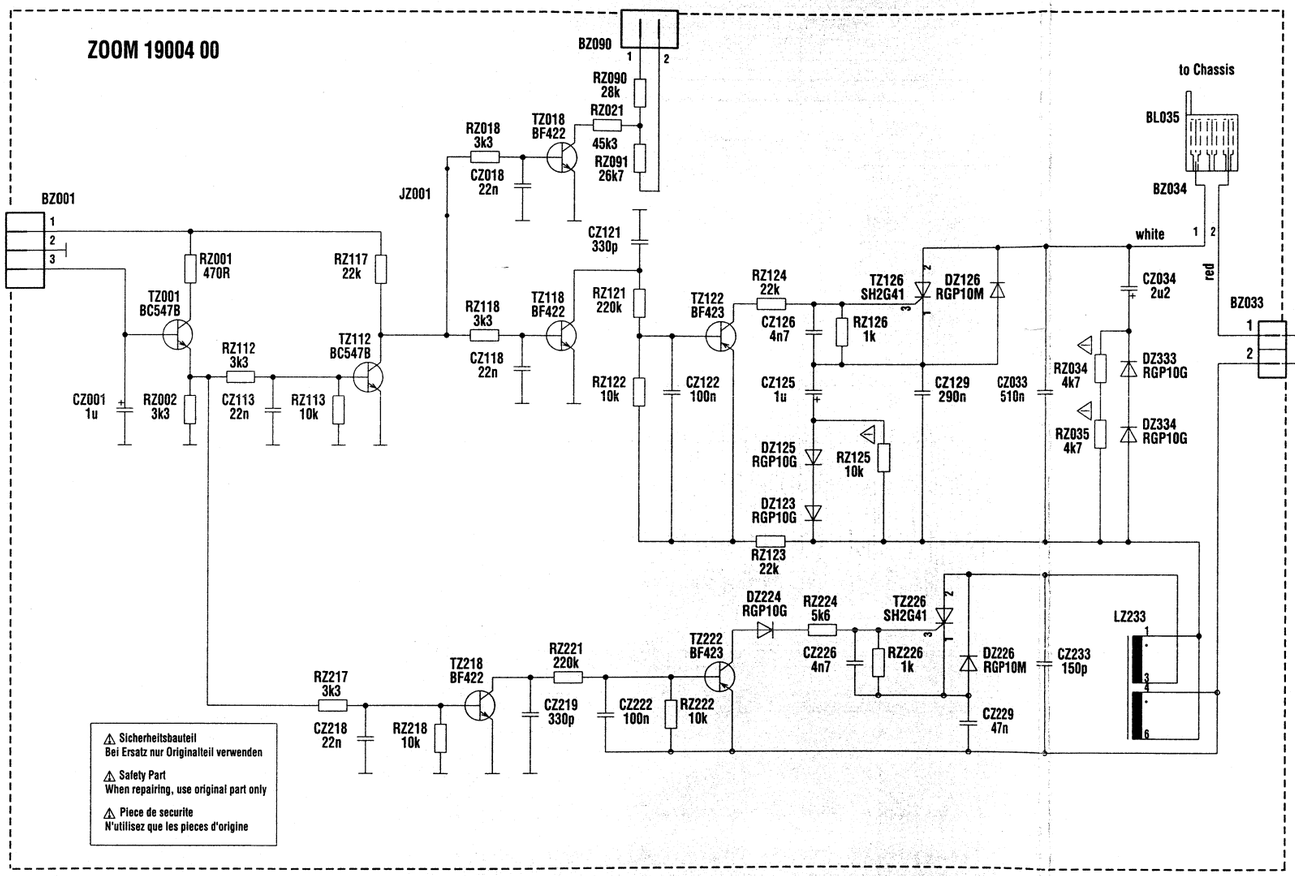
SOLDER SIDE - CÔTE SOUDURES - LÖTSEITE - LATO SALDATURE - LADO SOLDADURAS



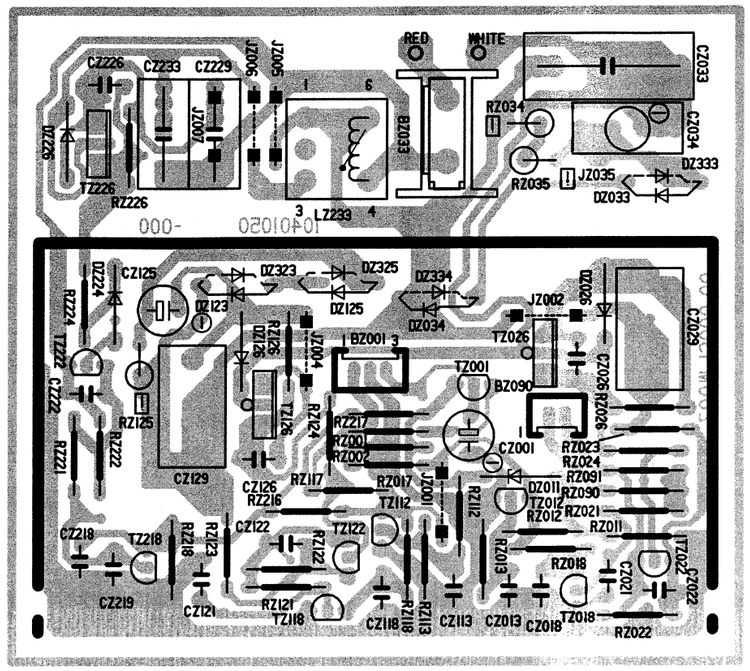
AUDIO SIGNAL MODULE - MODULE AUDIO - TON SIGNAL BAUSTEIN - MODULO AUDIO



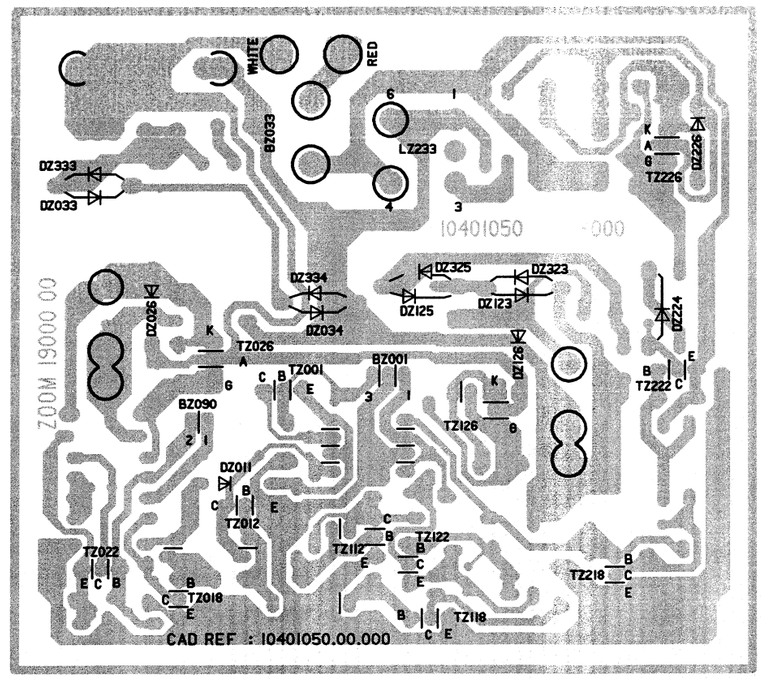
ZOOM 19004 00



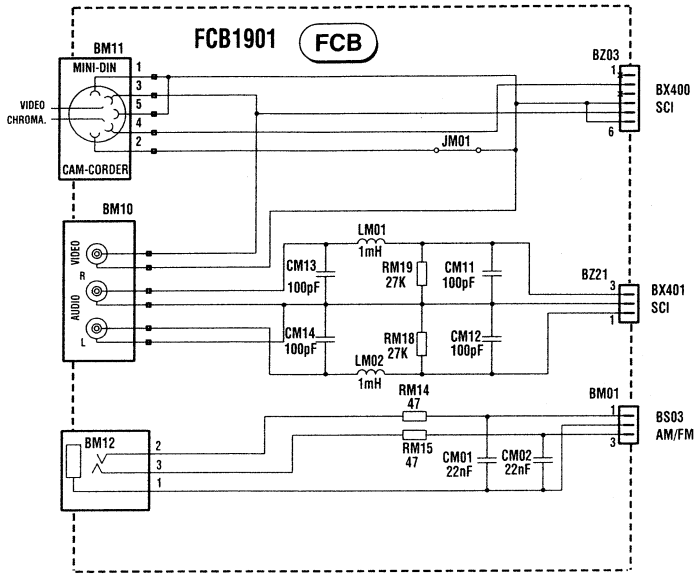
COMPONENT SIDE - COTE COMPOSANTS - BESTÜCKUNGSSEITE
LATO COMPONENTI - LADO COMPONENTES

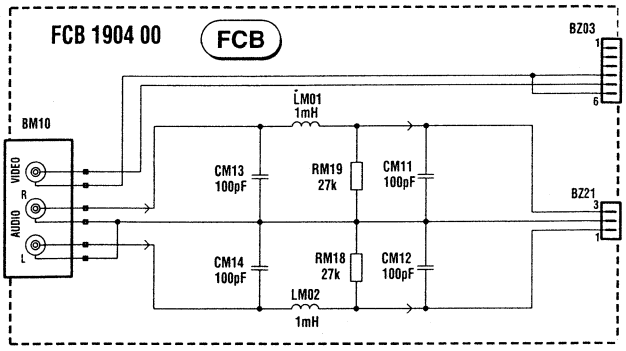


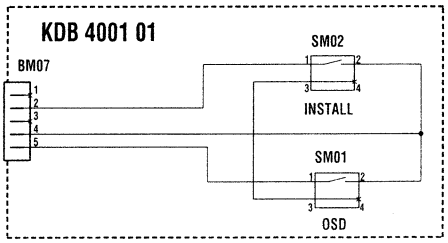
SOLDER SIDE - CÔTE SOUDURES - LÖTSEITE - LATO SALDATURE -
LADO SOLDADURAS

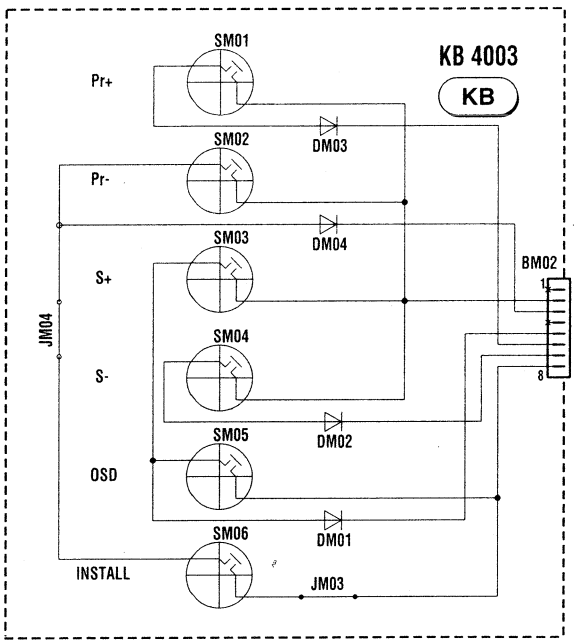


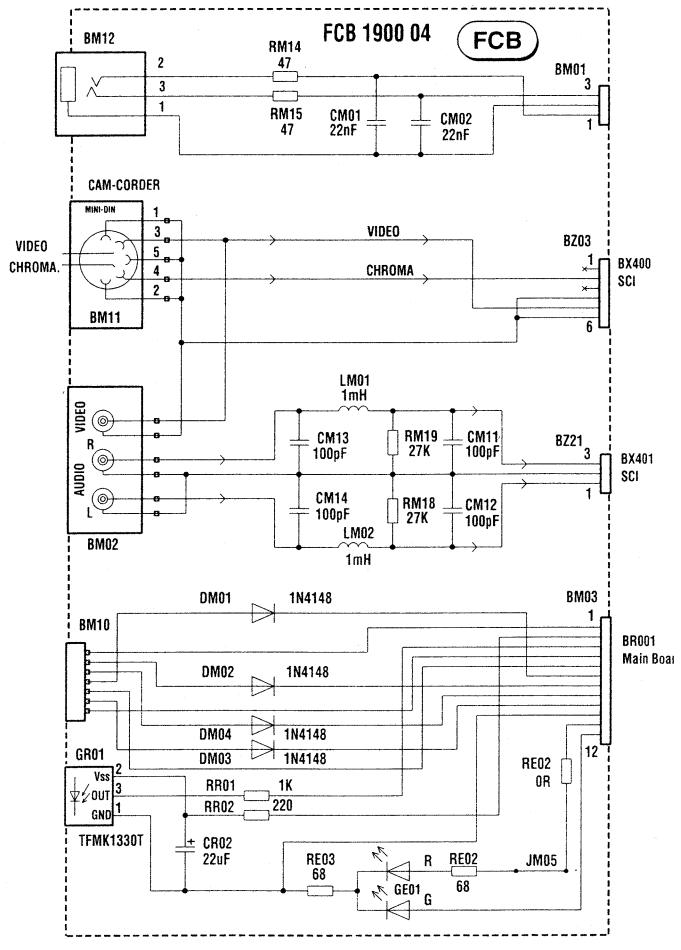
FRONT CONNECTOR BOARD - PRISES EN FACADE ET INTERCONNEXION DU CLAVIER - FRONT ANSCHLUSSPLATTE - PIASTRA CONNESSIONE FRONTALE - PLÁTINA MANDOS FRONTAL

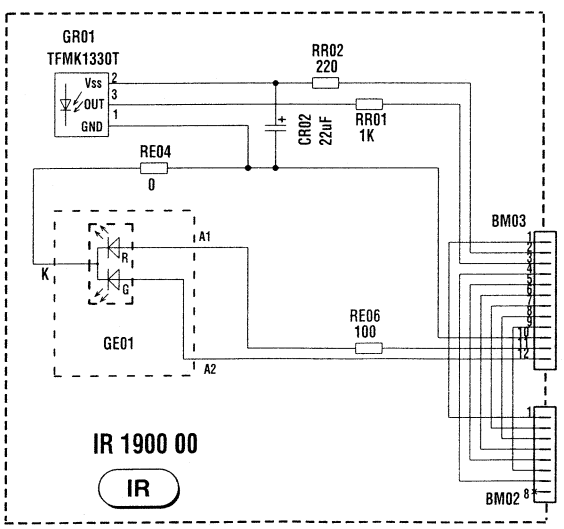






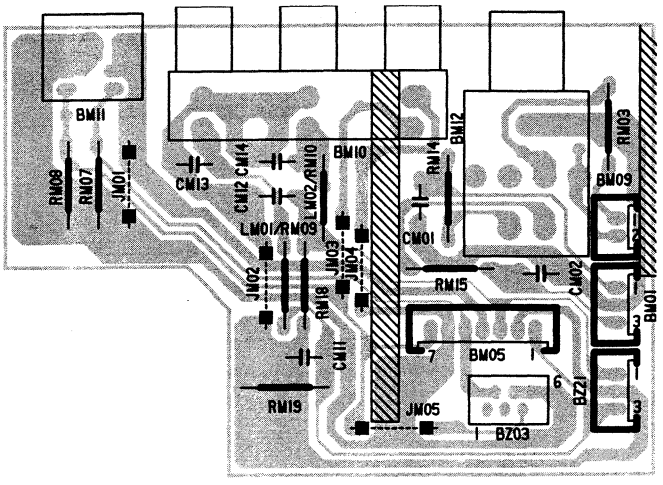




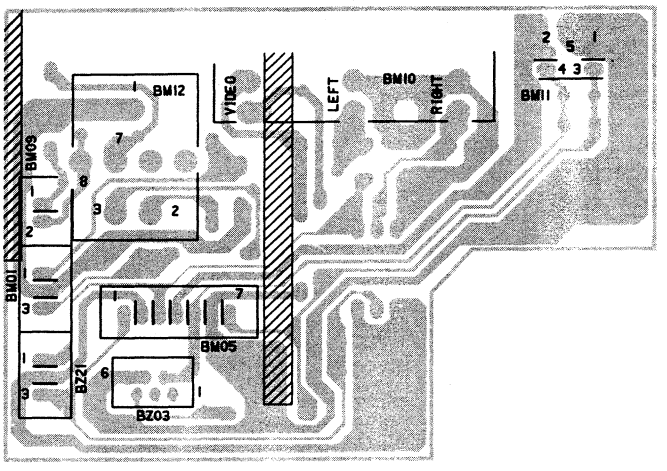


FCB 1901 - FCB 9069

COMPONENT SIDE - COTE COMPOSANTS - BESTÜCKUNGSSEITE - LATO COMPONENTI LADO COMPONENTES

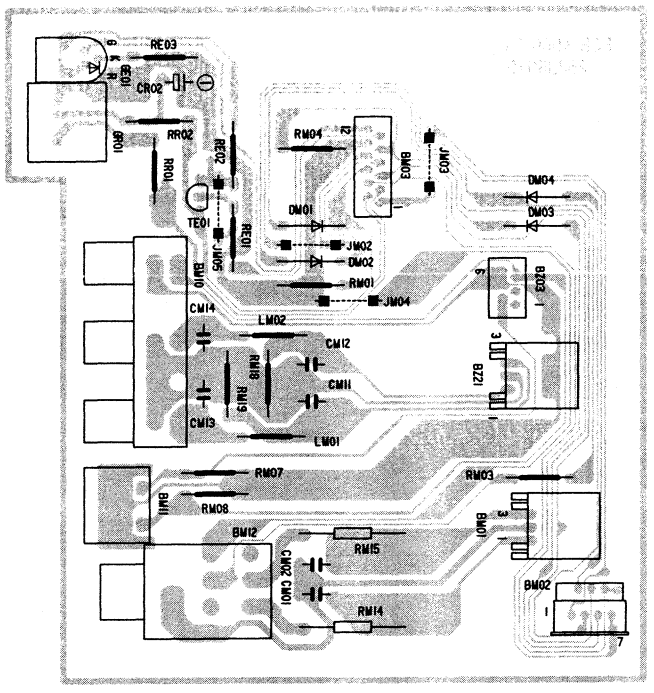


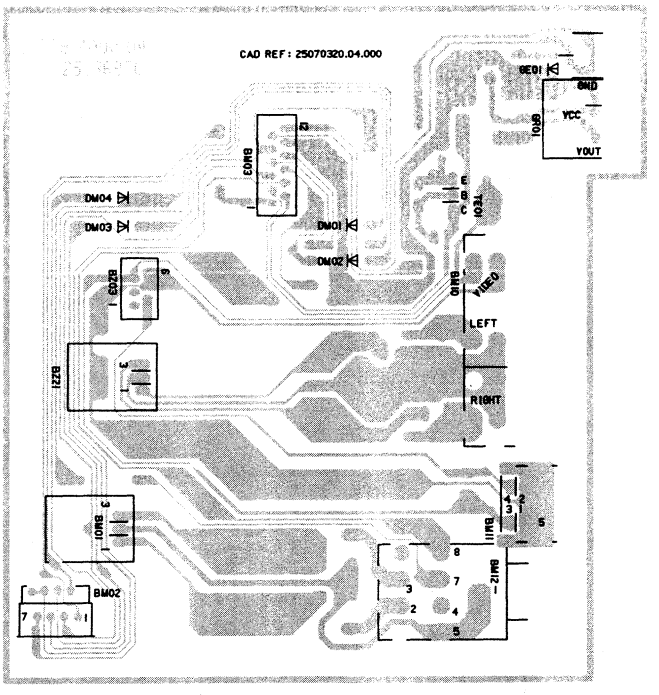
SOLDER SIDE - CÔTE SOUDURES - LÖTSEITE - LATO SALDATURE - LADO SOLDADURAS



FCB 1900

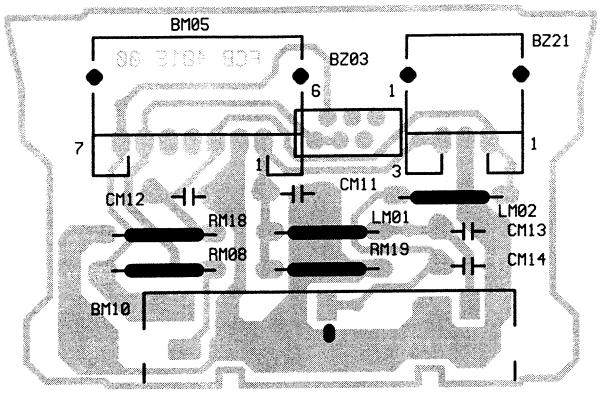
COMPONENT SIDE - COTE COMPOSANTS - BESTÜCKUNGSSEITE - LATO COMPONENTI LADO COMPONENTES



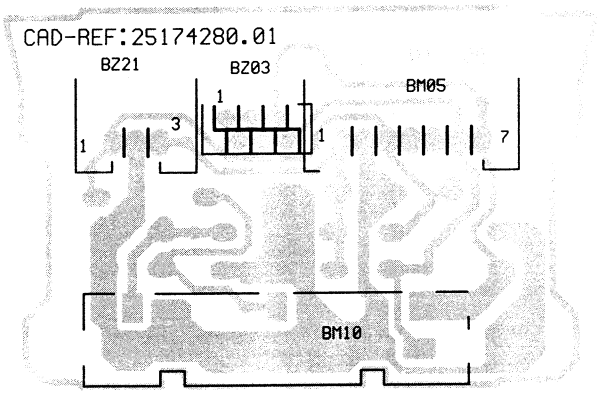


FCB 1904 - FCB 4015

COMPONENT SIDE - COTE COMPOSANTS - BESTÜCKUNGSSEITE - LATO COMPONENTI LADO COMPONENTES

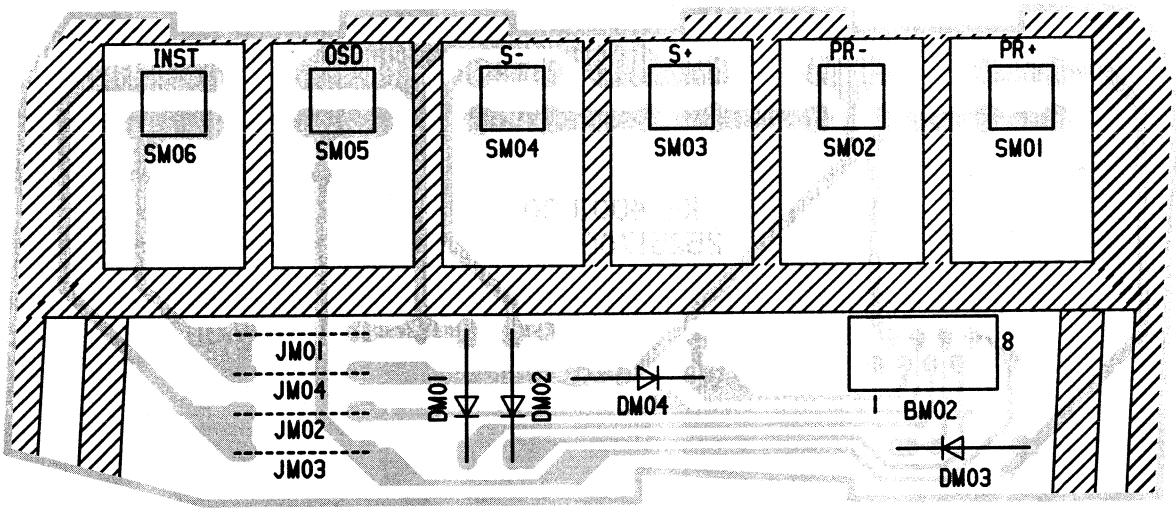


SOLDER SIDE - CÔTE SOUDURES - LÖTSEITE - LATO SALDATURE - LADO SOLDADURAS

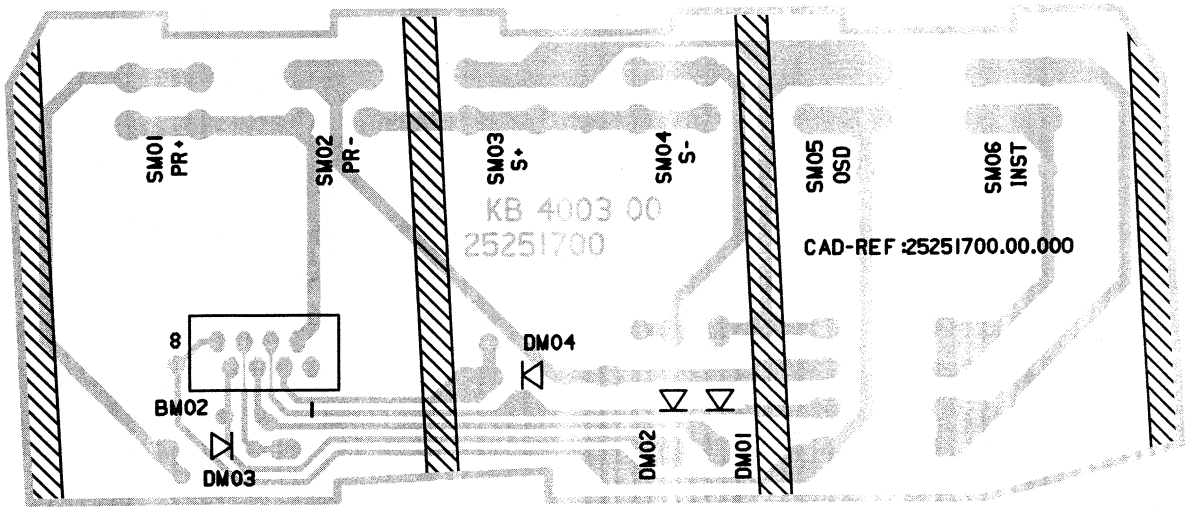


KB4003

COMPONENT SIDE - COTE COMPOSANTS - BESTÜCKUNGSSEITE - LATO COMPONENTI LADO COMPONENTES

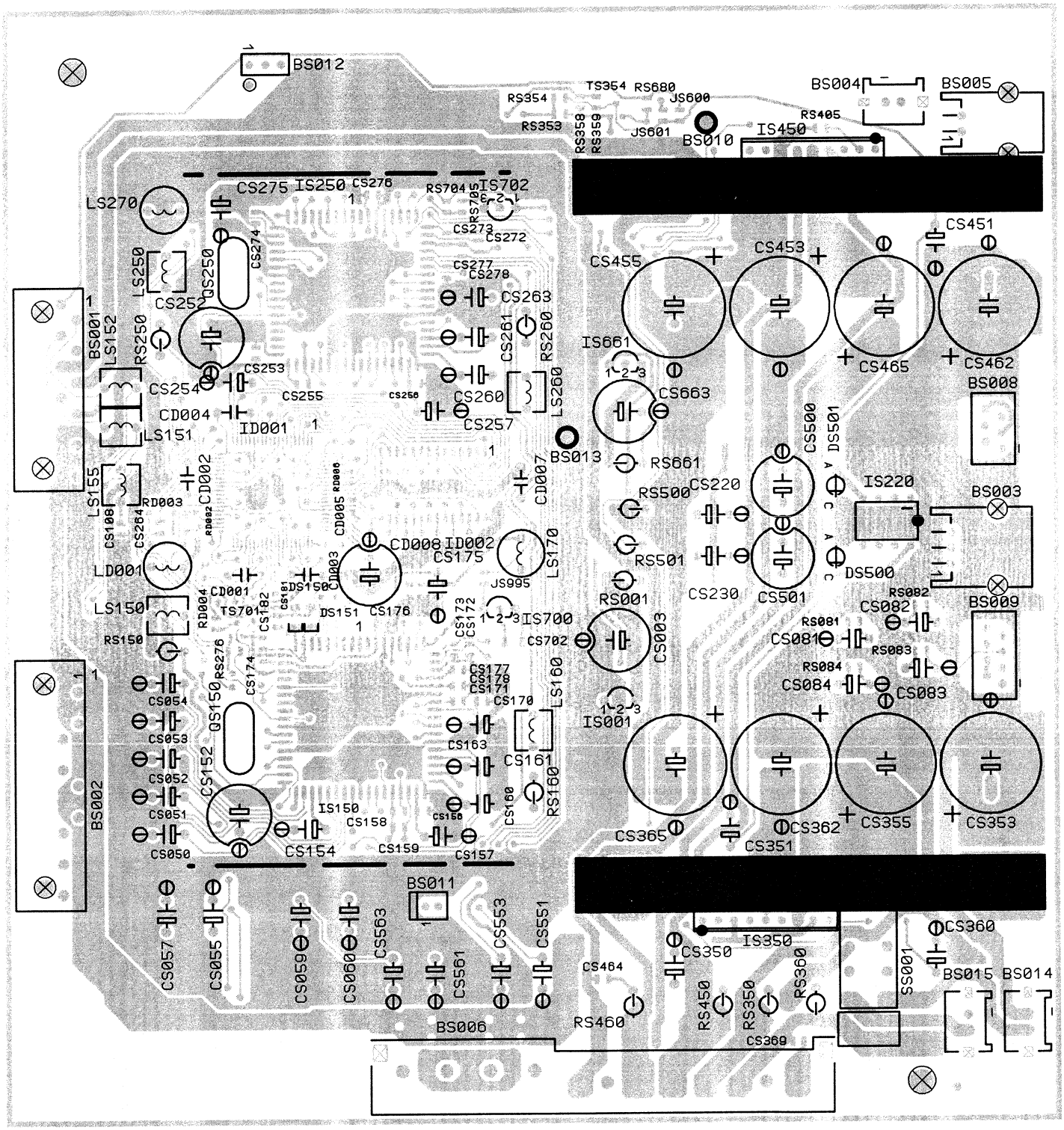


SOLDER SIDE - CÔTE SOUDURES - LÖTSEITE - LATO SALDATURE - LADO SOLDADURAS



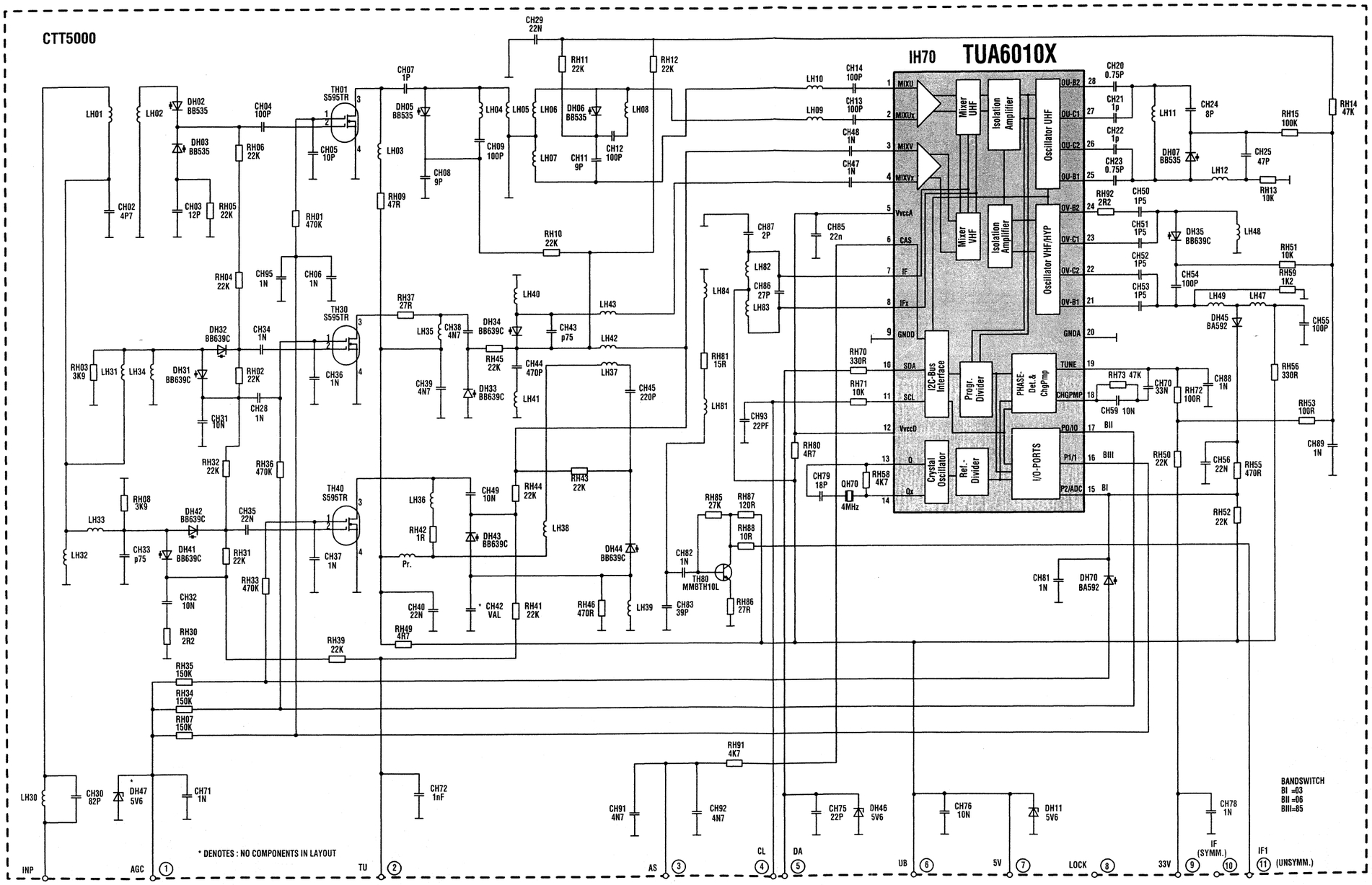
AUDIO SIGNAL/DOLBY MODULE - MODULE AUDIO/DOLBY - TON SIGNAL/DOLBY BAUSTEIN - MODULO AUDIO/DOLBY - MÓDULO AUDIO/DOLBY

COMPONENT SIDE - COTE COMPOSANTS - BESTÜCKUNGSSEITE
LATO COMPONENTI - LADO COMPONENTES

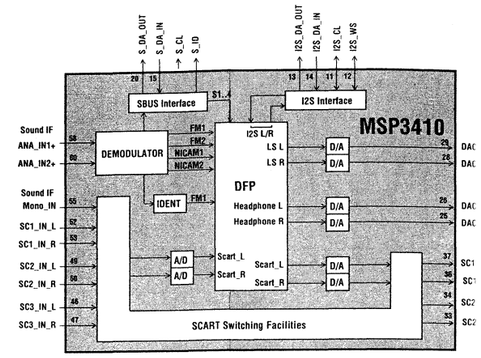


VHF / UHF TUNER CTT5000

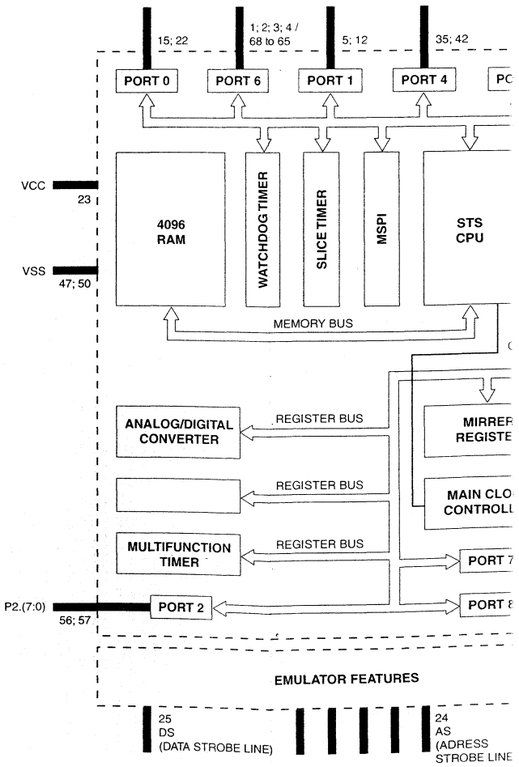
(For information only)



IS40 - MSP3410

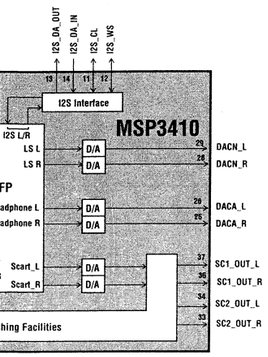


IR01 - ST90R92

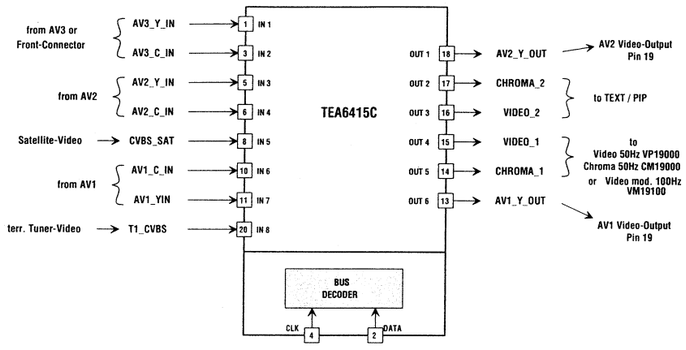


RCUITS BLOCK DIAGRAMS - SYNOPTIQUES INTERNES DES CIRCUITS INTEGRES
INTEGRIERTE SCHALTUNGEN BLOCKSCHALTBILDER
CCHI DEL CIRCUITI INTEGRATI - VISTA INTERNA DE LOS CIRCUITOS INTEGRADOS

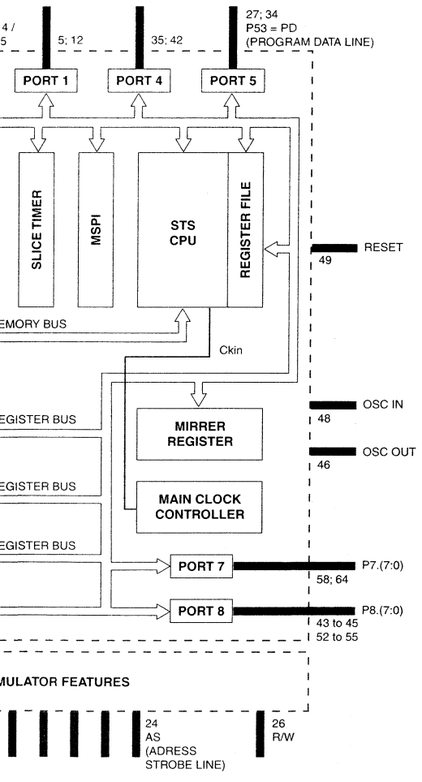
MSP3410



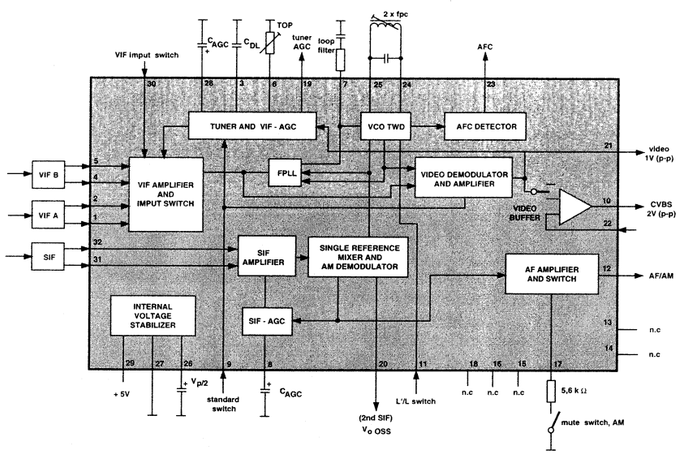
IX900 - TEA6415C



01 - ST90R92



II50 - TDA9811

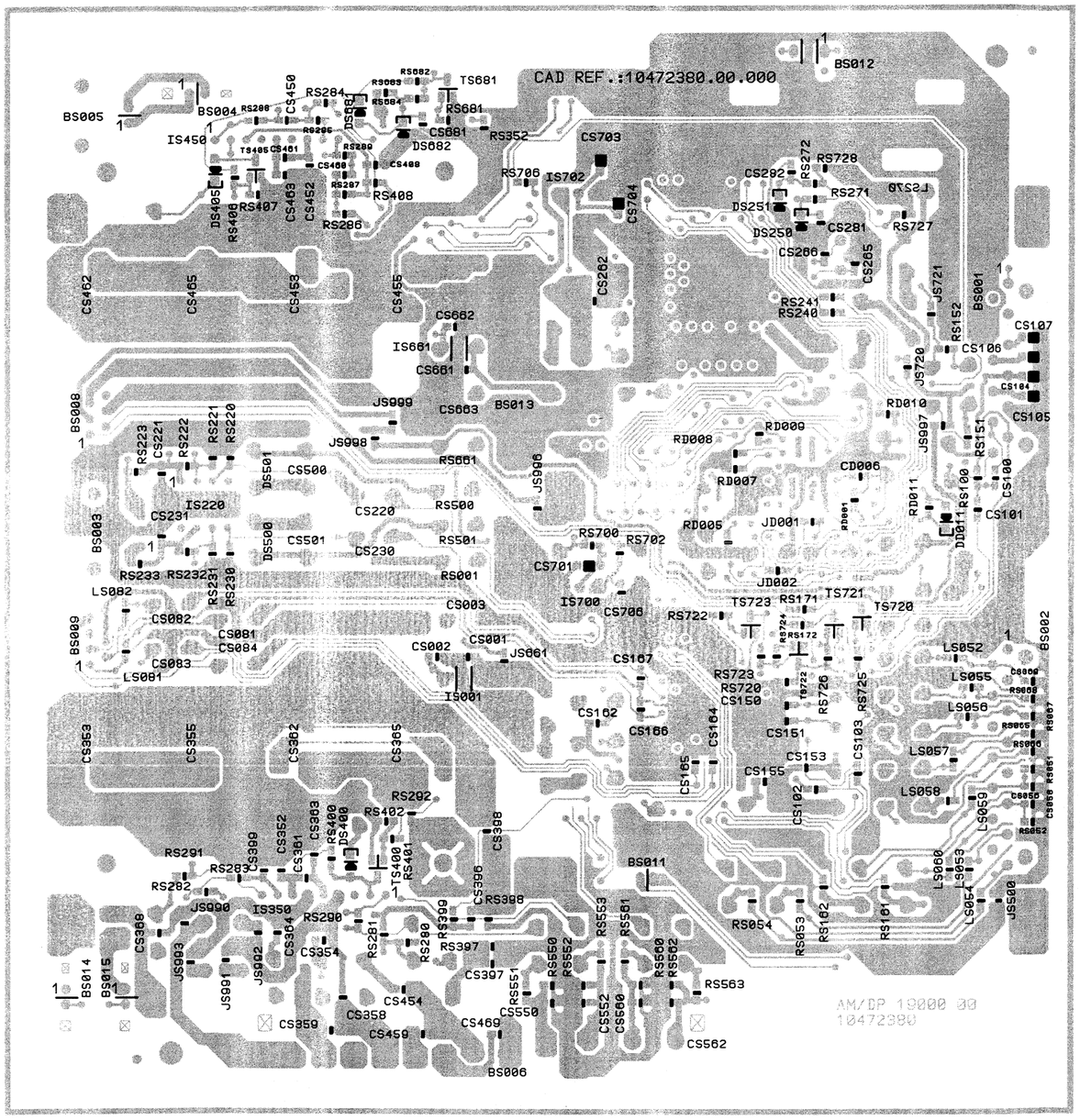


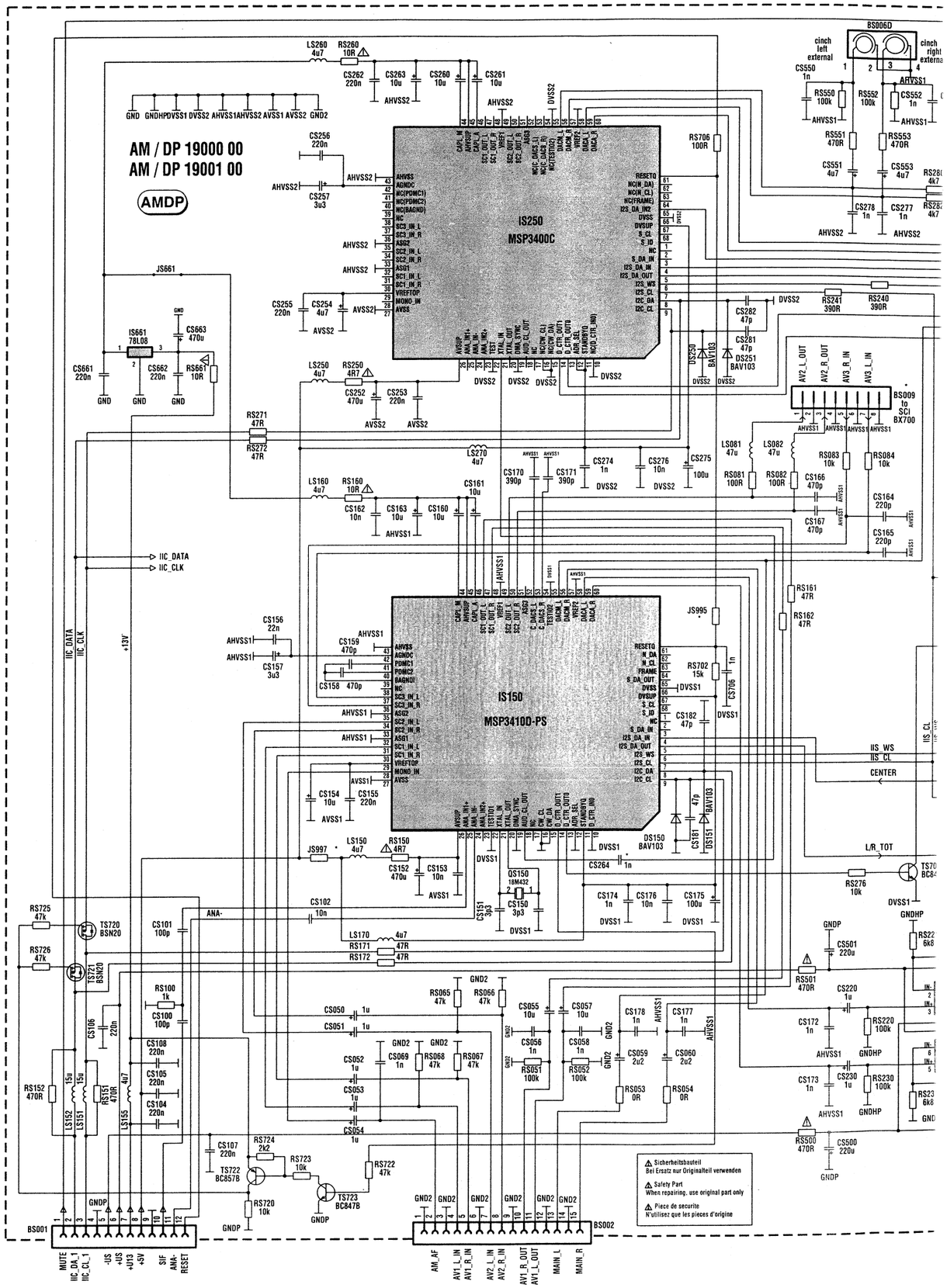
LIST OF ABBREVIATIONS - LISTE DES ABREVIATIONS - ABKÜRZUNGEN
LISTA DELLE ABBREVIAZIONI - LISTA DE ABREVIACIONES

AV_R_ OUT	Audio Right-Out
AV_I_ OUT	Audio Left-Out
AV_R_ IN	Audio Right-In
AV_L_ IN	Audio Left-In
AV_C_ IN	Chroma-In
AV_Y_ IN	Video-In
AV_Y_ OUT	Video-Out
AV1_8	Pin-8 Detector
BEAM_INFO	BEAM CURRENT INFORMATION
BG INFO	SWITCH BG
B_AV	B SIGNAL FROM AV
B_TXT	B SIGNAL FROM TEXTMODULE
CRT_B	B SIGNAL TO VIDEO AMPLIFIER
CRT_G	G SIGNAL TO VIDEO AMPLIFIER
CRT_R	R SIGNAL TO VIDEO AMPLIFIER
CVBS_SAT	SAT_VIDEO
DEGAUSS	DEGAUSS SIGNAL
E.W_DRIVE	EAST - WEST DRIVE SIGNAL
EW_BACK	FEED BACK INFORMATION
FB_AV	FAST BLANK SIGNAL FROM AV SCART
FB DETEC	FAST BLANKING DETECT
FB_TXT	FAST BLANK SIGNAL FROM TEXTMODUL
FRAME _DR	DRIVE SIGNAL FOR VERTICAL DEFLECTION
G_AV	G SIGNAL FROM AV
G_TXT	G SIGNAL FROM TEXTMODULE
HDFL	HORIZONTAL SYNC.
HDRV	DRIVE SIGNAL FOR HORIZONTAL DEFLECTION
HTR1 / HTR2	HEATER OUTPUT FROM THE DST TO CRT
I CUT	CUT OFF CURRENT
IIC-CL-1	I2C CLOCK BUS 1
IIC-CL-2	I2C CLOCK BUS 2
IIC-DA-1	I2C DATA BUS 1
IIC-DA-2	I2C DATA BUS 2
IR	INFRARED
L1_INFO	STANDARD L BAND 1
LDFL	LINE LOCKED CLOCK 27 MHz
LDR	LED DISPLAY
MAIN _Y	Y FROM CHROMA DECODER
MAIN _U	U FROM CHROMA DECODER
MAIN _V	V FROM CHROMA DECODER
M-RES	MASTER RESET TO MICROPROCESSOR
MUTE	MUTES AMPLFIERS
NMI	NON MASKABLE INTERRUPT (alternate function of Pin 55 STR092)
NORM	SWITCH POLARITY OF THE VIDEO SIGNAL TUNER
PLL-ON	ENABLE DEFLECTION PLL
PKS	SIGNAL FOR ABL CIRCUIT (STV2161/STV2162)
R_AV	R SIGNAL FROM AV
R_TXT	R SIGNAL FROM TEXTMODULE
SAFE	SAFETY INFORMATION FROM DEFLECTION
SMPS_IN	FEED BACK SIGNAL FOR POWER SUPPLY REGULATION (STV2161/2)
SSC	SUPER SAND CASTEL CIRCUIT
TEMP_ABL	SIGNAL DST-TEMPERATURE SENSING CIRCUIT
T1_CVBS	COMPOSITE VIDEO BASEBAND FROM TUNER
U_SCART	SCART VOLTAGE
+USYS	SYSTEM VOLTAGE
+/- US	SOUND VOLTAGE
+UVERT	VERTICAL VOLTAGE
+UVFB	VERTICAL RETRACE VOLTAGE
+UVIDEO	VIDEO VOLTAGE FOR THE CRT BOARD
VA	VERTICAL REFERENCE OUT FROM TDA 9143
VDFL	VERTICAL SYNC.
V-SYNC	VERTICAL SYNC.FOR TELETEXT MODULE
5 V	5V POWER SUPPLY
13 V	12V POWER SUPPLY
5 VSTBY	5V STAND BY
10 VSTBY	10V STAND BY

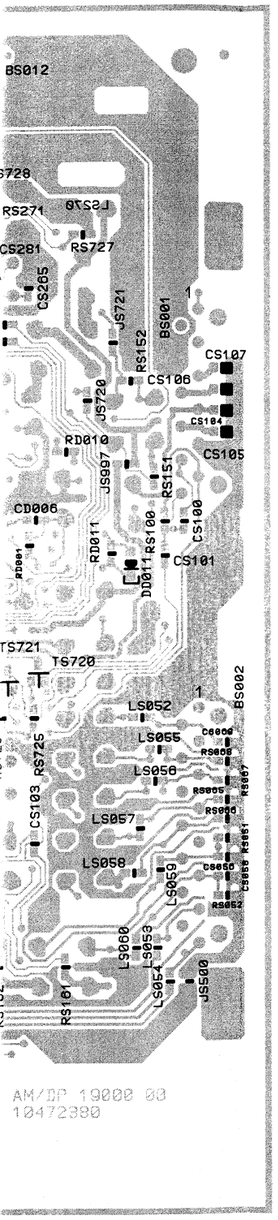
AUDIO SIGNAL/DOLBY MODULE - MODULE AUDIO/DOLBY - TON SIGNAL/DOLBY BAUSTEIN - MODULO AUDIO/DOLBY - MÓDULO AUDIO/DOLBY

SOLDER SIDE - CÔTE SOUDURES - LÖTSEITE - LATO SALDATURE - LADO SOLDADURAS





SOLDADURAS



AM / DP 19000 00
AM / DP 19001 00

AMDP

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AM/DP 19000 00	X	–	X	X	–	X	–	–